



ROY COOPER
Governor

MICHAEL S. REGAN
Secretary

MICHAEL A. ABRACZINSKAS
Director

XXX 2017

Mr. Howard P. Brown, Jr
President and CEO
Triangle Brick Company
6523 NC Hwy 55
Durham, NC 27713

SUBJECT: Air Quality Permit No. 06987T11
Facility ID: 1900077
Triangle Brick Company - Merry Oaks
Moncure, North Carolina
Chatham County
Fee Class: Title V
PSD Status: Minor

Dear Mr. Brown:

In accordance with your completed Air Quality Permit Application for a significant modification of a Title V permit received March 28, 2017, we are forwarding herewith Air Quality Permit No. 06987T11 to Triangle Brick Company - Merry Oaks, located on 294 King Road, Moncure, North Carolina, authorizing the operation of the emission source(s) and associated air pollution control device(s) specified herein. Additionally, any emissions activities determined from your Air Quality Permit Application as being insignificant per 15A North Carolina Administrative Code 02Q .0503 have been listed for informational purposes as an "ATTACHMENT." Please note the requirements for the annual compliance certification are contained in General Condition P in Section 3. The current owner is responsible for submitting a compliance certification for the entire year regardless of who owned the facility during the year.

As the designated responsible official, it is your responsibility to review, understand, and abide by all of the terms and conditions of the attached permit. It is also your responsibility to ensure that any person who operates any emission source and associated air pollution control device subject to any term or condition of the attached permit reviews, understands, and abides by the condition(s) of the attached permit that are applicable to that particular emission source.

If any parts, requirements, or limitations contained in this Air Quality Permit are unacceptable to you, you have the right to request a formal adjudicatory hearing within 30 days following receipt of this permit, identifying the specific issues to be contested. This hearing request must be in the form of a written petition, conforming to NCGS (North Carolina General Statutes) 150B-23, and filed with both the Office of Administrative Hearings, 6714 Mail Service Center, Raleigh, North Carolina 27699-6714 and the Division of Air Quality, Permitting Section, 1641 Mail Service Center, Raleigh, North Carolina 27699-1641. The form for requesting a formal adjudicatory hearing may be obtained upon request from the Office of Administrative Hearings. Please note that this permit will be stayed in its entirety upon receipt of the request for a hearing. Unless a request for

Mr. Brown

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a hearing is made pursuant to NCGS 150B-23, this Air Quality Permit shall be final and binding 30 days after issuance.

You may request modification of your Air Quality Permit through informal means pursuant to NCGS 150B-22. This request must be submitted in writing to the Director and must identify the specific provisions or issues for which the modification is sought. Please note that this Air Quality Permit will become final and binding regardless of a request for informal modification unless a request for a hearing is also made under NCGS 150B-23.

Chatham County has triggered increment tracking under PSD for SO₂, NO_x, and PM₁₀. However, this permit modification does not consume or expand increments for any pollutants.

This Air Quality Permit shall be effective from XXXX, 2017 until July 31, 2018, is nontransferable to future owners and operators, and shall be subject to the conditions and limitations as specified therein. Should you have any questions concerning this matter, please contact Betty Gatano, P.E., at (919) 707-8736.

Sincerely yours,

William D. Willets, P.E., Chief, Permitting
Section
Division of Air Quality, NCDEQ

Enclosure

c: Heather Ceron, EPA Region 4 (permit and review)
Raleigh Regional Office
Central Files
Connie Horne (cover letter only)

ATTACHMENT to Permit No. 06897T11

Insignificant Activities per 15A NCAC 02Q .0503(8)

Emission Source ID No.	Emission Source Description
IS-Tank1	24,000 gallon No. 6 fuel oil storage tank
IS-Tank2	24,000 gallon No. 2 fuel oil storage tank
IS-Tank3	24,000 gallon No. 2 fuel oil storage tank
IS-Tank4	24,000 gallon highway diesel fuel storage tank
IS-Tank5	24,000 gallon additive "A" storage tank
IS-Tank6	3,000 gallon gasoline storage tank
GACT CCCCCC	
IS-1.1	Conveyor to loam/sawdust system
IS-1.2	Conveyor to loam/sawdust system
IS-2.1	Loam screen
IS-2.2	Loam screen
IS-3.1	Loam crusher
IS-3.2	Loam crusher
IS-4.1	Oversize return conveyor from loam screen
IS-4.2	Oversize return conveyor from loam screen
IS-5.1	Oversize loam return shoot
IS-5.2	Oversize loam return shoot
IS-6.1	Sawdust screen
IS-6.2	Sawdust screen
IS-7.1	Conveyors to storage bin
IS-7.2	Conveyors to storage bin
IS-8.1	Oversize conveyor from sawdust screen
IS-8.2	Oversize conveyor from sawdust screen
IS-CD-50	Conveyor from extruder to pug mill
IS-CL1	Cosmetic loam operation area
IS-CL2	Cosmetic loam operation area
IS-EXTR1	Extrusion and setting line
IS-EXTR2	Extrusion and setting line
IS-LS1	Loam/sawdust feeders
IS-LS1	Loam/sawdust feeders

1. Because an activity is insignificant does not mean that the activity is exempted from an applicable requirement or that the Permittee is exempted from demonstrating compliance with any applicable requirement.
2. When applicable, emissions from stationary source activities identified above shall be included in determining compliance with the permit requirements for toxic air pollutants under 15A NCAC 02D .1100 "Control of Toxic Air Pollutants" or 02Q .0711 "Emission Rates Requiring a Permit."
3. For additional information regarding the applicability of MACT or GACT see the DAQ page titled "Specific Permit Conditions Regulatory Guide." The link to this site is as follows:
<http://deq.nc.gov/about/divisions/air-quality/air-quality-permits/specific-permit-conditions-regulatory-guide>.

Summary of Changes to Permit

The following changes were made to the Triangle Brick Company - Merry Oaks facility, Air Permit No. 06897T10

Pages	Section	Description of Changes
Cover and throughout	-	<ul style="list-style-type: none"> Updated all dates and permit revision numbers. Changed the term “State Only Requirements” to “State-Enforceable Only”
Cover letter-	--	Added PSD status of the facility to the cover letter.
Insignificant Activities List	--	Added the GACT CCCCCC label to the gasoline storage tank (ID No. IS-Tank6).
3	1.0 Equipment List	<ul style="list-style-type: none"> Removed reference to 15A NCAC 02D .1109, Case-by-Case MACT for the brick tunnel kilns (ID Nos. K-1, K-2, and K-3). These requirements are being removed under this permit modification. Removed asterisks and associated footnote stating the dry lime cascade adsorber (ID No. CD-K1K2) is not required for compliance with 15A NCAC 02D .1109, Case-by-Case MACT.
14	2.1 C – Regulations Table	<ul style="list-style-type: none"> Removed reference to 15A NCAC 02D .1109, Case-by-Case MACT. These requirements are being removed under this permit modification. Added reference to 15A NCAC 02D .0317 for avoidance of 02D .1111, MACT. Removed reference to 15A NCAC 2Q .0705, Existing Sources and SIC Calls. This rule was repealed on May 1, 2014.
--	2.1 C.6	Removed permit condition for 15A NCAC 02D .1109, Case-by-Case MACT for Brick Manufacturing. These requirements are being removed under this permit modification because the Permittee is accepting avoidance limits to become an area source of HAPs.
18	2.1 C.6	Added a permit condition for 15A NCAC 02D .0317 for avoidance of 02D .1111, MACT.
23	2.2 A – Regulations Table	Removed reference to 15A NCAC 2Q .0705, Existing Sources and SIC Calls. This rule was repealed on May 1, 2014.
23	2.2 A.2	Removed reference to 15A NCAC 2Q .0705, Existing Sources and SIC Calls. This rule was repealed on May 1, 2014.
25 – 33	Section 3	Updated the General Conditions to the most recent revision (V5.1: 08/03/2017).
34	Attachment	Updated the list of acronyms.



State of North Carolina
Department of Environmental Quality
Division of Air Quality

AIR QUALITY PERMIT

Permit No.	Replaces Permit No.	Effective Date	Expiration Date
06987T11	06897T10	XXXXX 2017	July 31, 2018

Until such time as this permit expires or is modified or revoked, the below named Permittee is permitted to construct and operate the emission sources and associated air pollution control devices specified herein, in accordance with the terms, conditions, and limitations within this permit. This permit is issued under the provisions of Article 21B of Chapter 143, General Statutes of North Carolina as amended, and Title 15A North Carolina Administrative Codes (15A NCAC), Subchapters 02D and 02Q, and other applicable Laws.

Pursuant to Title 15A NCAC, Subchapter 02Q, the Permittee shall not construct, operate, or modify any emission source(s) or air pollution control device(s) without having first submitted a complete Air Quality Permit Application to the permitting authority and received an Air Quality Permit, except as provided in this permit.

Permittee: **Triangle Brick Company - Merry Oaks**
Facility ID: **1900077**

Facility Site Location: **294 King Rd**
City, County, State, Zip: **Moncure, Chatham County, North Carolina 27559**

Mailing Address: **6523 NC Hwy 55**
City, State, Zip: **Durham, North Carolina 27713**

Application Number: **1900077.17A**
Complete Application Date: **March 28, 2017**

Primary SIC Code: **3251**

Division of Air Quality,
Regional Office Address: **Raleigh Regional Office**
3800 Barrett Drive, Suite 101
Raleigh, North Carolina 27609

Permit issued this the XXth day of December, 2017

William D. Willets, P.E., Chief, Air Permitting Section
By Authority of the Environmental Management Commission

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SECTION 1 - PERMITTED EMISSION SOURCE(S) AND ASSOCIATED AIR POLLUTION CONTROL DEVICE(S) AND APPURTENANCES

The following table contains a summary of all permitted emission sources and associated air pollution control devices and appurtenances:

Page Nos.	Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
Primary Crushing and Associated Conveyance				
6	PC-1	Shale Feeder	None	None
6	PC-2 NSPS OOO	Scalp Screen	None	None
6	PC-3 NSPS OOO	Jaw Crusher	None	None
6	PC-4 NSPS OOO	Conveyor under PC-2 and PC-3	PC-4A	Cover over conveyor belt
6	PC-5 NSPS OOO	Cross over Conveyor	PC-5A	Cover over conveyor belt
6	PC-6 NSPS OOO	Shuttle Conveyor (Enclosed in Clay Storage Building)	PC-6A	Cover over conveyor belt
Clay Grinding Operations				
10	CG-1	Clay Feeder	None	None
10	CG-2 NSPS OOO	Belt to Scalping Screen	None	None
10	CG-3 NSPS OOO	Scalping Screen	None	None
10	CG-4 NSPS OOO	Return Belt for Oversizes from Screens	PC-4A	Cover over conveyor belt
10	CG-5 NSPS OOO	Belt to Hammermill	PC-5A	Cover over conveyor belt
10	CG-6 NSPS OOO	Hammermill	PC-6A	Cover over conveyor belt
10	CG-7 NSPS OOO	Belt to Screens	N/A	None
10	CG-8 NSPS OOO	Belt over Finish Screen	N/A	None
10	CG-9 NSPS OOO	Finish Screen	N/A	None
10	CG-10 NSPS OOO	Finish Screen	N/A	None
10	CG-11 NSPS OOO	Finish Screen	None	None
10	CG-12 NSPS OOO	Finish Screen	None	None
10	CG-13 NSPS OOO	Belt to Storage Bins	None	None
10	CG-14 NSPS OOO	Belt over Storage Bins	None	None
10	CG-15 NSPS OOO	Feeders under Bins	None	None
10	CG-16 NSPS OOO	Feeders under Bins	CG-9A	Screen Cover

Page Nos.	Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
10	CG-17 NSPS 000	Feeders under Bins	CG-10A	Screen Cover
10	CG-18 NSPS 000	Feeders under Bins	CG-11A	Screen Cover
10	CG-19 NSPS 000	Feeders under Bins	CG-12A	Screen Cover
10	CG-20 NSPS 000	Feeders under Bins	None	None
10	CG-22 NSPS 000	Feeders under Bins	None	None
10	CG-23 NSPS 000	Feeders under Bins	None	None
10	CG-24 NSPS 000	Feeders under Bins	None	None
10	CG-25 NSPS 000	Conveyor from Storage Bin	None	None
10	CG-26 NSPS 000	Conveyor from Storage Bin	None	None
10	CG-27 NSPS 000	Conveyor to Pug Mill	None	None
10	CG-28 NSPS 000	Conveyor to Pug Mill	None	None
10	CG-29	Clay Feeder	None	None
10	CG-30 NSPS 000	Belt to Scalping Screen	None	None
10	CG-31 NSPS 000	Scalping Screen	None	None
10	CG-32 NSPS 000	Return Belt from Oversize Screen	None	None
10	CG-33 NSPS 000	Belt to Hammermill	None	None
10	CG-34 NSPS 000	Hammermill	N/A	None
10	CG-35 NSPS 000	Belt to Screens	N/A	None
10	CG-36 NSPS 000	Belt over Finish Screens	N/A	None
10	CG-37 NSPS 000	Finish Screen	None	None
10	CG-38 NSPS 000	Finish Screen	None	None
10	CG-39 NSPS 000	Finish Screen	None	None
10	CG-40 NSPS 000	Finish Screen	None	None
10	CG-41 NSPS 000	Belt to Storage Bins	None	None
10	CG-42 NSPS 000	Belt over Storage Bins	None	None
10	CG-43 NSPS 000	Feeders under Bins	None	None
10	CG-44 NSPS 000	Feeders under Bins	None	None

Page Nos.	Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
10	CG-45 NSPS OOO	Feeders under Bins	None	None
10	CG-46 NSPS OOO	Feeders under Bins	None	None
10	CG-47 NSPS OOO	Feeders under Bins	None	None
10	CG-48 NSPS OOO	Conveyor from Storage Bin	None	None
10	CG-49 NSPS OOO	Conveyor to Pug Mill	None	None
Brick Tunnel Kilns				
14	K-1	Kiln 1 Natural gas/No. 2 fuel oil/No. 6 fuel oil-fired brick tunnel kiln (14.5 tons/hour fired-brick capacity, 21.4 million Btu/hour heat input rate)	CD-K1K2	One dry lime cascade adsorber unit (52,000 acfm air flow)
14	K-2	Kiln 2 Natural gas/No. 2 fuel oil/No. 6 fuel oil-fired brick tunnel kiln (14.5 tons/hour fired brick capacity, 21.4 million Btu/hour heat input rate)		
14	K-3	Kiln 3 Natural gas/No. 2 fuel oil/No. 6 fuel oil-fired brick tunnel kiln (29 tons/hour fired-brick capacity, 42.8 million Btu/hour heat input rate)	CD-K3	One dry lime cascade adsorber unit (52,000 acfm air flow)
Rotary Coatings Dryer				
20	SD-1 NSPS UUU	Natural gas-fired rotary coatings dryer - (0.3 million Btu/hour heat input)	None	None

SECTION 2 - SPECIFIC LIMITATIONS AND CONDITIONS

2.1 Emission Source(s) and Control Device(s) Specific Limitations and Conditions

The emission source(s) and associated air pollution control device(s) and appurtenances listed below are subject to the following specific terms, conditions, and limitations, including the testing, monitoring, record keeping, and reporting requirements as specified herein:

A. Primary Crushing and Associated Conveyance including: Shale Feeder (ID No. PC-1) and NSPS affected facilities consisting of a scalp screen (ID No. PC-2), jaw crusher (ID No. PC-3), and three conveyors (ID Nos. PC-4, PC-5, and PC-6)

The following table provides a summary of limits and/or standards for the emission units in primary crushing and associated conveyance.

Regulated Pollutant	Limits/Standards	Applicable Regulation
Particulate matter including PM ₁₀	$E = 4.10P^{0.67}$ Where E = allowable emission rate in pounds per hour P = process weight in tons per hour Note limits and discussion in Section 2.1. A.1	15A NCAC 02D .0515
Visible emissions	20 percent opacity (ID No. PC-1) Note limits and discussion in Section 2.1. A.2	15A NCAC 02D .0521(d)
Visible emissions	Visible emissions from the affected units in the primary crushing, associated conveyance, building openings shall not exceed opacity limits of 15%, 10%, and 7% respectively. Note limits and discussion in Section 2.1.A.3.b,c, and d	15A NCAC 02D .0524 (40 CFR 60.670, Subpart OOO)
Odors	Odorous emissions must be controlled - Section 2.2. A.2 Facility Wide Affected Emission Sources; State-enforceable only	15A NCAC 02D .1806

1. 15A NCAC 02D .0515: PARTICULATE EMISSIONS FROM MISCELLANEOUS INDUSTRIAL PROCESSES

- a. Emissions of particulate matter from the shale feeder (ID No. PC-1) that are discharged into the atmosphere shall not exceed an allowable emission rate as calculated by the following equation: [15A NCAC 02D .0515(a) [Note this equation was chosen since the process throughput rate (process weight rate) is greater than 30 tons per hour]].

$$E = 55.0(P)^{0.11} - 40$$

Where E = allowable emission rate in pounds per hour
P = process weight in tons per hour

Liquid and gaseous fuels and combustion air are not considered as part of the process weight.

Testing [15A NCAC 02Q .0508(f)]

- b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test exceed the limit given in Section 2.1. A.1.a. (above), the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515.

Monitoring/Recordkeeping/Reporting [15A NCAC 02Q .0508(f)]

- c. No monitoring, record keeping, or reporting is required for the particulate matter emissions from the shale feeder (ID No. PC-1)

2. 15A NCAC 02D .0521: CONTROL OF VISIBLE EMISSIONS

- a. Visible emissions from the shale feeder (ID No. PC-1) shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent opacity not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity. [15A NCAC 02D .0521 (d)]

Testing [15A NCAC 02Q .0508(f)]

- b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test exceed the limit given in Section 2.1.A.2.a. (above), the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521.

Monitoring [15A NCAC 02Q .0508(f)]

- c. To ensure compliance, once a month the Permittee shall observe the shale feeder (**ID No. PC-1**) for any visible emissions above normal. The monthly observation must be made for each month of the calendar year period to ensure compliance with this requirement. If visible emissions from this source are observed to be above normal, the Permittee shall either:
- take appropriate action to correct the above-normal emissions as soon as practicable and within the monitoring period and record the action taken as provided in the recordkeeping requirements below, or
 - demonstrate that the percent opacity from the emission points of the emission source in accordance with 15A NCAC 02D .2610 (Method 9) for 12 minutes is below the limit given in Section 2.1 A.2.a above.
- If the above-normal emissions are not corrected per (i) above or if the demonstration in (ii) above cannot be made, the Permittee shall be deemed to be in noncompliance with 15A NCAC 02D .0521.

Recordkeeping [15A NCAC 02Q .0508(f)]

- d. The results of the monitoring shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
- the date and time of each recorded action;
 - the results of each observation and/or test noting those sources with emissions that were observed to be in noncompliance along with any corrective actions taken to reduce visible emissions; and
 - the results of any corrective actions performed.
- The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521 if these records are not maintained.

Reporting [15A NCAC 02Q .0508(f)]

- e. The Permittee shall submit a summary report of the observations postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

3. 15A NCAC 02D .0524: NSPS 40 CFR PART 60, SUBPART OOO - STANDARDS OF PERFORMANCE FOR NONMETALLIC MINERAL PROCESSING PLANTS.

- a. The Permittee shall comply with all applicable provisions, notification, testing, reporting, record keeping, and monitoring requirements contained in Environmental Management Commission Standard 15A NCAC 02D .0524 "New Source Performance Standards (NSPS) as promulgated in 40 CFR Part 60.670, Subpart OOO, including Subpart A "General Provisions."

Emission Standard(s) [15A NCAC 02D .0524]

- b. For the screening operation and belt conveyors (**ID Nos. PC-2, PC-4, PC-5, and PC-6**), the Permittee shall meet the requirements of this Subpart by demonstrating compliance with 40 CFR 60.672(b) visible emissions limit of ten (10) percent opacity from each individual affected facility.
- c. For the jaw crusher (**ID No. PC-3**), the Permittee shall meet the requirements of this Subpart by demonstrating compliance with 40 CFR 60.672(c) visible emissions limit of fifteen (15) percent opacity.
- d. For the shuttle conveyor (**ID No. PC-6**), which is enclosed in a building, the Permittee shall meet the requirements of this Subpart by demonstrating compliance with 40 CFR 60.672(e) emission limits in paragraphs (a) of this section (Section 2.1. A.3) and the Clay Storage Building (the building enclosing the shuttle conveyor (**ID No. PC-6**)) must comply with the following emission limit:
- No owner or operator shall cause to be discharged into the atmosphere from any building enclosing any transfer point on a conveyor belt or any other affected facility visible fugitive emissions must not exceed 7

percent opacity except emissions from a vent. A vent is defined in 40 CFR 60.671 as an opening through which there is mechanically induced air flow for the purpose of exhausting from a building air carrying particulate matter emissions from one or more affected facilities.

- e. The opacity standards set forth in this part shall apply at all times except during periods of startup, shutdown, malfunction, and as otherwise provided in the applicable standard.
- f. At all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on available information which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.
- g. Additionally, the Permittee shall comply with all applicable provisions, notification, testing, reporting, record keeping, and monitoring requirements contained in Environmental Management Commission Standard 15A NCAC 02D .0524 "New Source Performance Standards (NSPS) as promulgated in 40 CFR Part 60.670, Subpart OOO, including Subpart A "General Provisions."

Testing [15A NCAC 02Q .0508(f)]

- h. Initial compliance or when subsequent additional testing is required, shall be in accordance with the requirements of 15A NCAC 02D .0524 (40 CFR 60.670 (Subpart OOO)) and 15A NCAC 02D .0501(c)(8) and (18) (requirements shall include indoor lighting and contrasting background) and General Condition JJ. If test results exceed the applicable limit(s) as given in Section 2.1 A.3.a., b., c. or d., above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524.

Monitoring/Recordkeeping [15A NCAC 02Q .0508(f)]

- i. In conducting the performance tests required in by 40 CFR 60.8, the owner or operator shall use as reference methods and procedures, the test methods in 40 CFR Part 60, Appendix A or other methods and procedures as specified in this section, except as provided in 40 CFR 60.8(b).
- j. In determining compliance with the visible emissions standards in 40 CFR 60.672 (b), **see Section 2.1 A.3.b or c, above**, the owner or operator shall use 40 CFR Part 60 Appendix A, Method 9 (i.e., Method 9) and the procedures in 40 CFR 60.11, with the following additions:
 - i. The minimum distance between the observer and the emission source shall be 4.57 meters (15 feet).
 - ii. The observer shall, when possible, select a position that minimizes interference from other fugitive emission sources (e.g., road dust). The required observer position relative to the sun (Method 9, Section 2.1) must be followed.
- k. Compliance with opacity standards in this part shall be determined by conducting observations in accordance with Method 9. For purposes of determining initial compliance, the minimum total time of observations shall be 3 hours (thirty 6-minute averages) for the performance test or other set of observations (meaning those fugitive-type emission sources subject only to an opacity standard).
- l. When determining compliance with the fugitive emissions standard for any affected facility described under 40 CFR 60.672(b) [**Scalp Screen (ID No. PC-2), Conveyor under PC-2 and PC-3 (ID No. PC-4), Cross over conveyor (ID No. PC-5), and Shuttle conveyor (ID No. PC-6)**], the duration of the Method 9 observations may be reduced from 3 hours (thirty 6-minute averages) to 1 hour (ten 6-minute averages) only if the following conditions apply:
 - i. There are no individual readings greater than 10 percent opacity; and
 - ii. There are no more than 3 readings of 10 percent for the 1-hour period.
- m. When determining compliance with the fugitive emissions standard for the crusher (**ID No. PC-3**), the duration of the Method 9 observations may be reduced from 3 hours (thirty 6-minute averages) to 1 hour (ten 6-minute averages) only if the following conditions apply:
 - i. There are no individual readings greater than 15 percent opacity; and
 - ii. There are no more than 3 readings of 15 percent for the 1-hour period.
- n. In determining compliance with 40 CFR 60.672(e), the Permittee shall use 40 CFR Part 60, Appendix A, Method 22 (i.e., Method 22) to determine fugitive emissions. The performance test shall be conducted while the shuttle conveyor (**ID No. PC-6**) is operating inside the **Clay Storage Building**. The performance test shall be at least 75 minutes in duration, with each side of the building and the roof being observed for at least 15 minutes.
- o. The permittee may use either of the following procedures as alternatives to the reference methods and procedures specified in Sections 2.1 A.3.h., i., j., k., and l., above, if emissions from two or more facilities continuously interfere so that the opacity of fugitive emissions from an individual affected facility cannot be read:
 - i. Use for the combined emission stream the highest fugitive opacity standard applicable to any of the individual affected facilities contributing to the emissions stream.

- ii. Separate the emissions so that the opacity of emissions from each affected facility can be read.
- p. To ensure compliance with 40 CFR 60.672(b) and (c) [see Section 2.1. A.3.a. and b., above], the Permittee shall observe, on a monthly basis, fugitive emissions from each affected facility (i.e., the scalp screen (**ID No. PC-2**); the jaw crusher (**ID No. PC-3**); the conveyor under PC-2 and PC-3 (**ID No. PC-4**); and the cross over conveyor (**ID No. PC-5**)) for any visible emissions above normal. The Permittee shall establish “normal” for the affected facilities in the first 30 days following the effective date of the permit. Should visible fugitive emissions be observed to be above normal for an affected facility, the Permittee shall be
 - i. be deemed to be in noncompliance with 15A NCAC 02D .0524 or
 - ii. demonstrate that the visible fugitive emissions, in accordance with 15A NCAC 02D .0501(c)(8) and (18) [see Sections 2.1 A. 3.h., i., j., k., and l., above] are demonstrated to comply with the applicable limit(s) given in 40 CFR 60.672(b) [10% opacity for conveyors and transfer points (**ID Nos. PC-2, PC-4, and PC-5**)] and (c) [15% opacity for crushers (**ID No. PC-3**)].

If the demonstration in (b) above cannot be made, the Permittee shall be deemed to be in noncompliance with 15A NCAC 02D .0524.
- q. To ensure compliance with 40 CFR 60.672(e) [see Section 2.1. A.3.c., above], the Permittee shall observe, on a monthly basis, fugitive emissions from the **clay storage building**, which houses the shuttle conveyor (**ID No. PC-6**), for visible emissions. Should visible fugitive emissions be observed exceed 7 percent opacity from this building, the Permittee shall be deemed to be in noncompliance with 15A NCAC 25 .0524, **UNLESS**, an approved Method 22 opacity determination meeting the requirements of 40 CFR 60.670 (Subpart OOO) (see Section 2.1. A.3.m., above) is performed for visible fugitive emissions from the **clay storage building** and visible fugitive emissions are demonstrated to comply with the applicable limit(s) given in 40 CFR 60.672(e) [visible emissions not to exceed 7 percent opacity from buildings]. If compliance for the **clay storage building** cannot be demonstrated, then the shuttle conveyor (**ID No. PC-6**) shall be deemed to be in noncompliance with 15A NCAC 02D .0524, **UNLESS** an approved Method 9 opacity determination meeting the requirements of 40 CFR 60.670 (Subpart OOO) and 15A NCAC 02D .0501(c)(8) and (18) [see Sections 2.1. A.3.h., i., j., k., and l., above], is performed on the shuttle conveyor (**ID No. PC-6**) and visible fugitive emissions are demonstrated to comply with the applicable limit(s) given in 40 CFR 60.672(b) [10% for conveyors and transfer points]. If compliance for the shuttle conveyor (**ID No. PC-6**) cannot be demonstrated, then the shuttle conveyor (**ID No. PC-6**) shall be deemed to be in noncompliance with 15A NCAC 02D .0524.
- r. The results of the performance evaluations, discussed above in Section 2.1 A.3.o. and p., shall be maintained in a log (written or electronic format) on-site and made available to an authorized representative of DAQ upon request. The log shall record the following:
 - i. the date and time of each recorded action;
 - ii. the results of each observation and/or test noting those sources with emissions that were observed to be in noncompliance along with any corrective actions taken to reduce visible emissions; and
 - iii. the results of any corrective actions performed.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524 if these records are not maintained.
- s. The Permittee shall retain records of all information resulting from monitoring activities and information indicating operating parameters as specified in this condition for a minimum of five (5) years from the date of recording.

Reporting [15A NCAC 02Q .0508(f)]

- t. The Permittee shall submit written reports of the results of all performance tests and evaluations conducted to demonstrate compliance with the standards set forth in 40 CFR 60.672, see Section 2.1. A.3.a., b., c., and d., above, including reports of opacity observations made using Method 9 to demonstrate compliance with 40 CFR 60.672(b) and reports of using Method 22 to demonstrate compliance with 40 CFR 60.672(e) by January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.
- u. The Permittee shall make available, upon request by DAQ, such records as may be necessary to determine the conditions under which the visual observations were made and shall provide evidence indicating proof of current visible observer emission certification.
- v. In addition to any other notification requirements to the Environmental Protection Agency (EPA), the Permittee is required to **NOTIFY** the Regional Supervisor, DAQ, in **WRITING**, of the following:
 - i. the date construction (40 CFR 60.7) or reconstruction (40 CFR 60.15) of an affected facility is commenced, postmarked no later than 30 days after such date;

- ii. the anticipated date of initial start-up of an affected facility, postmarked not more than 60 days nor less than 30 days prior to such date; and
- iii. the actual date of initial start-up of an affected facility, postmarked within 15 days after such date.

B. Clay Grinding Operations (Feeders (ID Nos. CG-1 and CG-29) and NSPS affected facilities consisting of conveyors, screens, and hammer mills (ID Nos. CG-2 thru CG-20, CG-22 thru CG-28, and CG-30 thru CG-49))

The following table provides a summary of limits and/or standards for the units that comprise the clay grinding operations.

Regulated Pollutant	Limits/Standards	Applicable Regulation
Particulate matter including PM ₁₀	$E = 4.10P^{0.67}$ where E = allowable emission rate in pounds per hour P = process weight in tons per hour Note limits and discussion in Section 2.1. B.1	15A NCAC 02D .0515
Visible emissions	20 percent opacity Note limits and discussion in Section 2.1. B.2	15A NCAC 02D .0521(d)
Visible emissions	Emissions of particulate matter and visible emissions from hammer mills and conveying systems shall not exceed limits discussed in Section 2.1. B.3	15A NCAC 02D .0524 (40 CFR 60.670, Subpart OOO)
Odors	Odorous emissions must be controlled - Section 2.2. A.2 Facility Wide Affected Emission Sources; State-enforceable only	15A NCAC 02D .1806

1. 15A NCAC 02D .0515: PARTICULATE EMISSIONS FROM MISCELLANEOUS INDUSTRIAL PROCESSES

Regulatory Requirements

- a. Emissions of particulate matter from the clay feeders (**ID No. CG-1 and CG-29**) that are discharged into the atmosphere shall not exceed an allowable emission rate as calculated by the following equation: [15A NCAC 02D .0515(a)]

$$E = 55.0(P)^{0.11} - 40 \quad \text{Where } E = \text{allowable emission rate in pounds per hour}$$

$$P = \text{process weight in tons per hour}$$

Liquid and gaseous fuels and combustion air are not considered as part of the process weight.

Testing [15A NCAC 02Q .0508(f)]

- b. If emissions testing is required, the testing shall be performed in accordance with 15A NCAC 02D .0501(c)(3) and General Condition JJ found in Section 3. If the results of the test performed exceed the limits given in Section 2.1. B.1.a. (above) for particulate matter, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515.

Monitoring/Recordkeeping/Reporting [15A NCAC 02Q .0508(f)]

- c. As the potential emissions of particulate matter are expected to be significantly less than the emission limits of 15A NCAC 02D .0515, no monitoring, record keeping, or reporting are required for the emissions from the clay feeders (**ID Nos. CG-1 and CG-29**)

2. 15A NCAC 02D .0521: CONTROL OF VISIBLE EMISSIONS

Regulatory Requirements

- a. Visible emissions from the clay feeders (**ID Nos. CG-1 and CG-29**) shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent opacity not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity. [15A NCAC 02D .0521 (d)]

Testing [15A NCAC 02Q .0508(f)]

- b. If emissions testing is required, the testing shall be performed in accordance with 15A NCAC 02D .0501(c)(8) and General Condition JJ found in Section 3. If the results of the test performed exceed the limits given in Section 2.1. B.2.a. (above) for visible emissions, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521.

Monitoring [15A NCAC 02Q .0508(f)]

- c. To ensure compliance, once a month the Permittee shall observe the clay feeders (**ID Nos. CG-1 and CG-29**) for any visible emissions above normal. The monthly observation must be made for each month of the calendar year period to ensure compliance with this requirement. If visible emissions from this source are observed to be above normal, the Permittee shall either:
 - i. take appropriate action to correct the above-normal emissions as soon as practicable and within the monitoring period and record the action taken as provided in the recordkeeping requirements below, or
 - ii. demonstrate that the percent opacity from the emission points of the emission source in accordance with 15A NCAC 02D .0501(c)(8) is below the limit given in Section 2.1 B.2.a above.If the above-normal emissions are not corrected per (i) above or if the demonstration in (ii) above cannot be made, the Permittee shall be deemed to be in noncompliance with 15A NCAC 02D .0521.

Recordkeeping [15A NCAC 02Q .0508(f)]

- d. The results of the monitoring shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
 - i. the date and time of each recorded action;
 - ii. the results of each observation and/or test noting those sources with emissions that were observed to be in noncompliance along with any corrective actions taken to reduce visible emissions; and
 - iii. the results of any corrective actions performed.The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521 if these records are not maintained.

Reporting [15A NCAC 02Q .0508(f)]

- e. The Permittee shall submit a summary report of monitoring and record keeping activities by January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

3. 15A NCAC 02D .0524: NEW SOURCE PERFORMANCE STANDARDS (40 CFR 60 SUBPART OOO (40 CFR 60.670--60.676) STANDARDS OF PERFORMANCE FOR NONMETALLIC MINERAL PROCESSING PLANTS)

- a. The Permittee shall comply with all applicable provisions, notification, testing, reporting, record keeping, and monitoring requirements contained in Environmental Management Commission Standard 15A NCAC 02D .0524 "New Source Performance Standards (NSPS) as promulgated in 40 CFR Part 60.670, Subpart OOO, including Subpart A "General Provisions."

Emission Standard(s) [15A NCAC 02D .0524]

- b. As required by 40 CFR 60.672(a), on and after the date on which the performance test required to be conducted by 40 CFR 60.8 is completed, no owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere from any transfer point on belt conveyors or from any other affected facility any stack emissions which:
 - i. Contain particulate matter in excess of 0.05 g/dscm (0.022 gr/dscf); and
 - ii. Exhibit greater than 7 percent opacity
- b. For the screening operations and belt conveyors, the Permittee shall meet the requirements of this Subpart by demonstrating compliance with 40 CFR 60.672(b) visible emissions limit of ten (10) percent opacity from each individual affected facility.
- c. For the hammer mills (**ID Nos. CG-6 and CG-34**), the Permittee shall meet the requirements of this Subpart by demonstrating compliance with 40 CFR 60.672(b) visible emissions limit of fifteen (15) percent opacity.
- d. As required by 40 CFR 60.672(e), if any transfer point on a conveyor belt or any other affected facility is enclosed in a building, then each enclosed affected facility must comply with the emission limits in paragraphs (a), (b), and (c) of this section (Section 2.1. B.3), or the building enclosing the affected facility or facilities must comply with the following emission limits:

- i. No owner or operator shall cause to be discharged into the atmosphere from any building enclosing any transfer point on a conveyor belt or any other affected facility any visible fugitive emissions must not exceed 7 percent opacity from the building opening except emissions from a vent as defined in 40 CFR 60.671.
- ii. No owner or operator shall cause to be discharged into the atmosphere from any vent of any building enclosing any transfer point on a conveyor belt or any other affected facility emissions which exceed the stack emissions limits in paragraph (a) of this section (Section 2.1. B.3).
- e. The opacity standards set forth in this part shall apply at all times except during periods of startup, shutdown, malfunction, and as otherwise provided in the applicable standard.
- f. At all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on available information which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.
- g. Additionally, the Permittee shall comply with all applicable provisions, notification, testing, reporting, record keeping, and monitoring requirements contained in Environmental Management Commission Standard 15A NCAC 02D .0524 "New Source Performance Standards (NSPS) as promulgated in 40 CFR Part 60.670, Subpart OOO, including Subpart A "General Provisions."

Testing [15A NCAC 02Q .0508(f)]

- h. Initial compliance or when subsequent additional testing is required, shall be in accordance with the requirements of 15A NCAC 02D .0524 (40 CFR 60.670, Subpart OOO), 15A NCAC 02D .0501(c)(8) and (18) (requirements shall include indoor lighting and contrasting background) and General Condition JJ, has been or will be performed when determining compliance of each individual affected facility with 40 CFR 60.672(a), (b) and (c) **OR** Method 22 testing, in accordance with the requirements of 15A NCAC 02D .0524 (40 CFR 60.670 (Subpart OOO), 15A NCAC 02D .0501(c)(8) and (18) and General Condition JJ, has been or will be performed when determining compliance with the 7 percent opacity standard of 40 CFR 60.672(e). If test results exceed the applicable limit(s) as given in Section 2.1 B. 1. a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524.

Monitoring/Recordkeeping [15A NCAC 02Q .0508(f)]

- i. In conducting the performance tests required in by 40 CFR 60.8, the owner or operator shall use as reference methods and procedures, the test methods in 40 CFR Part 60, Appendix A or other methods and procedures as specified in this section, except as provided in 40 CFR 60.8(b).
- j. In determining compliance with the particulate matter standards in 40 CFR 60.672 (b) and (c), **see Section 2.1 B.3. b and c, above**, the owner or operator shall use 40 CFR Part 60 Appendix A, Method 9 (i.e., Method 9) and the procedures in 40 CFR 60.11, with the following additions:
 - i. The minimum distance between the observer and the emission source shall be 4.57 meters (15 feet).
 - ii. The observer shall, when possible, select a position that minimizes interference from other fugitive emission sources (e.g., road dust). The required observer position relative to the sun (Method 9, Section 2.1) must be followed.
- k. Compliance with opacity standards in this part shall be determined by conducting observations in accordance with Method 9. For purposes of determining initial compliance, the minimum total time of observations shall be 3 hours (thirty 6-minute averages) for the performance test or other set of observations (meaning those fugitive-type emission sources subject only to an opacity standard).
- l. When determining compliance with the fugitive emissions standard for any affected facility described under 40 CFR 60.672(b) [**screens, conveyors, belts, and feeders**], the duration of the Method 9 observations may be reduced from 3 hours (thirty 6-minute averages) to 1 hour (ten 6-minute averages) only if the following conditions apply:
 - i. There are no individual readings greater than 10 percent opacity; and
 - ii. There are no more than 3 readings of 10 percent for the 1-hour period.
- m. When determining compliance with the fugitive emissions standard for the hammer mills (**ID Nos. CG-6 and CG-34**), the duration of the Method 9 observations may be reduced from 3 hours (thirty 6-minute averages) to 1 hour (ten 6-minute averages) only if the following conditions apply:
 - i. There are no individual readings greater than 15 percent opacity; and
 - ii. There are no more than 3 readings of 15 percent for the 1-hour period.
- n. In determining compliance with 40 CFR 60.672(e), the permittee shall use 40 CFR Part 60, Appendix A, Method 22 (i.e., Method 22) to determine fugitive emissions. The performance test shall be conducted while the affected

units are operating inside the building enclosure. The performance test shall be at least 75 minutes in duration, with each side of the building and the roof being observed for at least 15 minutes.

- o. The permittee may use either of the following procedures as alternatives to the reference methods and procedures specified in Sections 2.1 B.3.j., k., l., m., and n., above, if emissions from two or more facilities continuously interfere so that the opacity of fugitive emissions from an individual affected facility cannot be read:
 - i. Use for the combined emission stream the highest fugitive opacity standard applicable to any of the individual affected facilities contributing to the emissions stream.
 - ii. Separate the emissions so that the opacity of emissions from each affected facility can be read
- p. To ensure compliance with the emission limits defined in 40 CFR 60.672, the Permittee shall:
 - i. observe, on a monthly basis, emissions from the building enclosing the clay grinding operations for visible emissions exceeding 7 percent opacity. Should visible emissions exceeding 7 percent opacity be observed, the Permittee shall be deemed to be in noncompliance with 15A NCAC 02D .0524, **UNLESS**, an approved Method 22 opacity determination meeting the requirements of 40 CFR 60.670 (Subpart OOO), **see Section 2.1. B.3.o., above**, is performed and visible emissions are demonstrated to comply with the applicable limit(s) given in 40 CFR 60.672(e) [7% opacity for building openings except for vents as defined by 40 CFR 60.671]. If compliance cannot be demonstrated, then each affected facility enclosed in the building for which compliance cannot be demonstrated shall be deemed to be in noncompliance with 15A NCAC 02D .0524 and 40 CFR 60.670, **UNLESS** a compliance demonstration for each affected unit of the clay grinding operation is performed using an approved Method 9 opacity determination meeting the requirements of 40 CFR 60.670 (Subpart OOO) and 15A NCAC 02D .0501(c)(8) and (18) is performed and visible emissions are demonstrated to comply with the applicable limit(s) given in 40 CFR 60.672(b) and (c), **see Sections 2.1. B.3.b., and c., above**. If compliance of each enclosed affected facility cannot be demonstrated, then each affected facility for which compliance cannot be demonstrated shall be deemed to be in noncompliance with 15A NCAC 02D .0524 **OR**:
 - ii. observe, on a monthly basis, emissions from each enclosed affected facility for any visible emissions. Should visible emissions exceeding 7 percent opacity be observed for an affected facility, the Permittee shall be deemed to be in noncompliance with 15A NCAC 02D .0524, **UNLESS**, an approved Method 9 opacity determination meeting the requirements of 40 CFR 60.670 (Subpart OOO) and 15A NCAC 02D .0501(c)(8) and (18) is performed and visible emissions are demonstrated to comply with the applicable limit(s) given in 40 CFR 60.672(b) [10% opacity for each screen, conveyor, feeder, or transfer point (**see units and limits listed in Section 2.1. B.3.h., above**)] and (c) [15% for each hammer mill (**ID Nos. CG-6 and CG-34**)]. If compliance of each enclosed affected facility cannot be demonstrated, then each affected facility for which compliance cannot be demonstrated shall be deemed to be in noncompliance with 15A NCAC 02D .0524.
- q. The results of the performance evaluations, discussed above in Section 2.1. B.3.q., shall be maintained in a log (written or electronic format) on-site and made available to an authorized representative of DAQ upon request. The log shall record the following:
 - i. the date and time of each recorded action;
 - ii. the results of each observation and/or test noting those sources with emissions that were observed to be in noncompliance along with any corrective actions taken to reduce visible emissions; and
 - iii. the results of any corrective actions performed.The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524 if these records are not maintained.
- r. To ensure compliance with the requirements of 40 CFR 60.672(a)(1), the Permittee shall perform periodic inspections and maintenance as needed and as recommended by the manufacturer for each affected facility in the clay grinding operations. In addition to the manufacturer's inspection and maintenance recommendations, or if there is no manufacturer's inspection and maintenance recommendations, as a minimum, the inspection and maintenance requirement shall include the following:
 - i. a semi-annual internal inspection of screens, belts, conveyors, and associated covers and duct work that comprise the clay grinding operations for deterioration, damage, and leaks.The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524 if the affected facilities and duct work in the clay grinding operations are not visually inspected.
- s. The results of inspection and maintenance shall be maintained in a log (written or electronic format) on-site and made available to an authorized representative of DAQ upon request. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524 if the clay grinding operations are not inspected and maintained. The log shall record the following:
 - i. the date and time of each recorded action;
 - ii. the results of each inspection; and
 - iii. the results of any maintenance performed on the clay grinding operations; and
 - iv. any variance from manufacturer's recommendations, if any, and corrections made.

- The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524 if these records are not maintained.
- t. The Permittee shall retain records of all information resulting from monitoring activities and information indicating operating parameters as specified in this condition for a minimum of five (5) years from the date of recording.

Reporting [15A NCAC 02Q .0508(f)]

- u. The Permittee shall submit written reports of the results of all performance tests conducted to demonstrate compliance with the standards set forth in 40 CFR 60.672, including reports of opacity observations made using Method 9 to demonstrate compliance with 40 CFR 60.672(b) and (c) and reports of observations using Method 22 to demonstrate compliance with 40 CFR 60.672(e) by January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.
- v. The Permittee shall make available, upon request by DAQ, such records as may be necessary to determine the conditions under which the visual observations were made and shall provide evidence indicating proof of current visible observer emission certification.
- w. In addition to any other notification requirements to the Environmental Protection Agency (EPA), the Permittee is required to NOTIFY the Regional Supervisor, DAQ, in WRITING, of the following:
- the date construction (40 CFR 60.7) or reconstruction (40 CFR 60.15) of an affected facility is commenced, postmarked no later than 30 days after such date;
 - the anticipated date of initial start-up of an affected facility, postmarked not more than 60 days nor less than 30 days prior to such date; and
 - the actual date of initial start-up of an affected facility, postmarked within 15 days after such date.

C. Brick Tunnel Kilns (ID Nos. K-1, K-2, and K-3, 14.5, 14.5, and 29 tons per hour fired-brick capacity, respectively) with associated dry lime adsorbers (CD-K1K2 and CD-K3)

The following table provides a summary of limits and/or standards for the brick tunnel kilns.

Regulated Pollutant	Limits/Standards	Applicable Regulation
Particulate matter including PM ₁₀	$E = 4.10P^{0.67}$ Where E = allowable emission rate in pounds per hour P = process weight in tons per hour Note limits and discussion in Section 2.1. C.1	15A NCAC 02D .0515
Sulfur dioxide	2.3 pounds per million Btu heat input Note limits and discussion in Section 2.1 C.2	15A NCAC 02D .0516(a)
Visible emissions	20 percent opacity Note limits and discussion in Section 2.1. C.3	15A NCAC 02D .0521(d)
Sulfur dioxide	Facility-wide emissions shall not exceed 250 tons per year. Note limits and discussion in Section 2.1. C.4	15A NCAC 02Q .0317 (Avoidance of 02D .0530)
Toxic air pollutants	Permit limits for toxic air pollutants shall not be exceeded. See Section 2.1. C.5. State-enforceable only.	15A NCAC 02D .1100
Hazardous Air Pollutants	less than 10 tons per year of any HAP and less than 25 tons per year of a combination of HAPs	15A NCAC 02D .0317 (Avoidance of 02D .1111)
Odors	Odorous emissions must be controlled - Section 2.2. A.1 Facility Wide Affected Emission Sources; State-enforceable	15A NCAC 02D .1806
Toxic air pollutants	Toxic air pollutant emissions shall not exceed the levels listed in 02Q .0711 unless ambient standards are not exceeded; See Section 2.2. A.2 Facility Wide Affected Emission Sources; State-enforceable only, See Multiple Emission Section 2.2	15A NCAC 02Q .0711

1. 15A NCAC 02D .0515: PARTICULATE EMISSIONS FROM MISCELLANEOUS INDUSTRIAL PROCESSES

- a. Emissions of particulate matter from the brick tunnel kilns that are discharged into the atmosphere shall not exceed an allowable emission rate as calculated by the following equations: [15A NCAC 02D .0515(a)].

$$E = 4.10 \times P^{0.67} \quad \text{Where } E = \text{allowable emission rate in pounds per hour} \\ P = \text{process weight rate in tons per hour}$$

Liquid and gaseous fuels and combustion air are not considered as part of the process weight.

Testing [15A NCAC 02Q .0508(f)]

- b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ found in Section 3. If the results of the test performed exceed the limits given in Section 2.1. C.1.a. (above) for particulate matter, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515.

Monitoring/Recordkeeping/Reporting [15A NCAC 02Q .0508(f)]

- c. As the potential emissions of particulate matter are expected to be significantly less than the emission limits of 15A NCAC 02D .0515, no monitoring, record keeping, or reporting are required for the emissions from the three brick tunnel kilns.

2. 15A NCAC 02D .0516: SULFUR DIOXIDE EMISSIONS FROM COMBUSTION SOURCES

- a. Emissions of sulfur dioxide from the brick tunnel kilns shall not exceed 2.3 pounds per million Btu heat input. Sulfur dioxide formed by the combustion of sulfur in fuels, wastes, ores, and other substances shall be included when determining compliance with this standard. [15A NCAC 02D .0516].

Testing [15A NCAC 02Q .0508(f)]

- b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ found in Section 3. If the results of this test are above the limit given in Section 2.1 C.2. a., above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0516.

Monitoring/Recordkeeping [15A NCAC 02Q .0508(f)]

- c. No monitoring, record keeping, or reporting is required for sulfur dioxide emissions from the firing of natural gas or No. 2 fuel oil in the kilns (**ID Nos. K-1, K-2, and K-3**).
- d. To ensure compliance **when firing No. 6 fuel oil**, the Permittee shall monitor the sulfur content and BTU content of the No. 6 fuel oil by using fuel oil supplier certification per shipment received. The results of the fuel oil supplier certifications shall be recorded in a log (written or electronic format) on a quarterly basis and include the following information:
- the name of the fuel oil supplier;
 - the heat of combustion - BTU content
 - the method used to determine the heat of combustion (BTU content) of the fuel oil
 - the maximum sulfur content of the fuel oil received during the quarter;
 - the method used to determine the maximum sulfur content of the fuel oil; and
 - a certified statement signed by the responsible official that the records of fuel oil supplier certification submitted represent all of the No. 6 fuel oil fired during the period.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0516 if the sulfur content and BTU content of the oil is not monitored and recorded.

Reporting [15A NCAC 02Q .0508(f)]

- e. The Permittee shall submit a summary report of the fuel oil supplier certifications postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. The fuel summary report shall contain the following information:
- the quantity and type of fuels burned
 - the BTU value
 - the sulfur content in percent by weight
 - the calculated sulfur dioxide emission rates expressed in pounds of sulfur dioxide per million BTU input.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0516 if the calculated emission rates exceed 2.3 million pounds of sulfur dioxide per million BTU heat input.

3. 15A NCAC 02D .0521: CONTROL OF VISIBLE EMISSIONS

- a. As required by 15A NCAC 02D .0521 "Control of Visible Emissions," visible emissions from the brick tunnel kilns shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent opacity not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity. [15A NCAC 02D .0521 (d)]

Testing [15A NCAC 02Q .0508(f)]

- b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ found in Section 3. If the results of the test performed exceed the limits given in Section 2.1. C.3.a. (above) for visible emissions, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521.

Monitoring [15A NCAC 02Q .0508(f)]

- c. To ensure compliance, on a monthly basis the Permittee shall observe the brick tunnel kilns for any visible emissions above normal. The monthly observation must be made for each month of the calendar year period to ensure compliance with this requirement. If visible emissions from this source are observed to be above normal, the Permittee shall either:
- take appropriate action to correct the above-normal emissions as soon as practicable and within the monitoring period and record the action taken as provided in the recordkeeping requirements below, or
 - demonstrate that the percent opacity from the emission points of the emission source in accordance with 15A NCAC 02D .2610 (Method 9) for 12 minutes is below the limit given in Section 2.1 C.3.a above.
- If the above-normal emissions are not corrected per (i) above or if the demonstration in (ii) above cannot be made, the Permittee shall be deemed to be in noncompliance with 15A NCAC 02D .0521.

Recordkeeping [15A NCAC 02Q .0508(f)]

- d. The results of the monitoring shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
- the date and time of each recorded action;
 - the results of each observation and/or test noting those sources with emissions that were observed to be in noncompliance along with any corrective actions taken to reduce visible emissions; and
 - the results of any corrective actions performed.
- The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521 if these records are not maintained.

Reporting [15A NCAC 02Q .0508(f)]

- e. The Permittee shall submit a summary report of monitoring and record keeping activities by January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

4. 15A NCAC 02Q. 0317: AVOIDANCE CONDITIONS for 15A NCAC 02D .0530: PREVENTION OF SIGNIFICANT DETERIORATION AVOIDANCE

- a. To comply with this Permit and to avoid applicability of 15A NCAC 02D .0530, "Prevention of Significant Deterioration," as requested by the Permittee, emissions of sulfur dioxide from the facility must be **less than 250 tons** per consecutive twelve (12) month period. [15A NCAC 02D .0530]

Monitoring/Recordkeeping [15A NCAC 02Q .0508(f)]

- b. To ensure emissions do not exceed the limitations above, the following restrictions shall apply:
- The Permittee shall keep monthly records of the total amount of No. 2 fuel oil, No.6 fuel oil, and natural gas burned in the three brick kilns (**ID Nos. K-1, K-2, and K-3**)
 - The sulfur dioxide emissions from the combustion of each of the fuels shall be calculated each month using the following formulas:

$$E_{SO_2} = [(0.0627 \text{ lb SO}_2 / \text{tons bricks fired}) \times (XB) + (71 \text{ lbs SO}_2 / 1000 \text{ gallons No. 2 fuel oil}) \times (Y2) + (329.7 \text{ lbs SO}_2 / 1000 \text{ gallons No. 6 fuel oil}) \times (Z6) + (0.6 \text{ lbs SO}_2 / 10^6 \text{ scf Natural gas}) \times (Ng)] / (2,000 \text{ lbs/ton})$$

and where:

XB = tons of bricks manufactured per month

Y2 = gallons of No. 2 fuel oil combusted per month

Z6 = gallons of No. 6 fuel oil combusted per month

Ng = 10^6 scf of Natural gas

- iii. The sulfur contents of the No. 2 and No. 6 fuel oils shall not exceed 0.5 % by weight and 2.1% by weight, respectively. To ensure compliance, the Permittee shall monitor the sulfur content of the No. 6 fuel oil by using fuel oil supplier certification per shipment received. The results of the fuel oil supplier certifications shall be recorded in a log (written or electronic format) on a quarterly basis and include the following information:

- (a) the name of the fuel oil supplier;
- (b) the maximum sulfur content of the fuel oil received during the quarter;
- (c) the method used to determine the maximum sulfur content of the fuel oil; and
- (d) a certified statement signed by the responsible official that the records of fuel oil supplier certification submitted represent all of the No. 6 fuel oil fired during the period.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0516 if the sulfur content of the oil is not monitored and recorded.

- c. The monthly calculations of sulfur dioxide emissions shall be recorded in a log (written or electronic format). The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if the sulfur dioxide emissions are not calculated and recorded.

Reporting [15A NCAC 02Q .0508(f)]

- d. The Permittee must make copies of the monthly emissions log available to officials of the Division of Air Quality, upon request. The Permittee must keep each entry in the monthly emissions log and all required records on file for a minimum of five (5) years.
- e. For compliance purposes, within thirty (30) days after each calendar year quarter, the Permittee shall report the monthly sulfur dioxide emissions for the previous fourteen (14) months to the Regional Supervisor, Division of Air Quality: The emissions must be calculated for each of the three twelve month periods over the previous fourteen months. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if the total sulfur dioxide emissions from the facility exceed 250 tons/year.

State-Enforceable Only

5. 15 A NCAC 02D .1100: CONTROL OF TOXIC AIR POLLUTANTS

- a. Pursuant to 15A NCAC 02D .1100 "Control of Toxic Air Pollutants", and in accordance with the approved application for an air toxic compliance demonstration, the following permit limits shall not be exceeded:

Emission Source(s)	Toxic Air Pollutant(s)	Emission Limit(s)
Three brick kilns (ID Nos. K-1, K-2, and K-3)	Arsenic and inorganic arsenic compounds	38.63 pounds per year
	Benzene (71-43-2)	25,023.43 pounds per year
	Benzo(a)pyrene (50-32-8)	7,024.0 pounds per year
	Beryllium (7440-41-7)	873.33 pounds per year
	Cadmium (7440-43-9)	1,151.55 pounds per year

Emission Source(s)	Toxic Air Pollutant(s)	Emission Limit(s)
	Chlorine (7782-50-5)	1,131.88 pounds per day and 151 pounds per hour
	Chromium (vi)	17.30 pounds per year
	Hydrogen chloride (7647-01-0)	115.44 pounds per hour
	Hydrogen fluoride (7664-39-3)	878.11 pounds per day and 41.21 pounds per hour
	Mercury, vapor (7439-97-6)	44.36 pounds per day
	Nickel metal (7440-02-0)	4.95 pounds per day

6. 15A NCAC 02Q. 0317: AVOIDANCE CONDITIONS for 15A NCAC 02D .1111: MAXIMUM ACHIEVABLE CONTROL TECHNOLOGY

- a. In order to remain classified a minor source for hazardous air pollutants and avoid applicability of this regulation, facility emissions shall be less than:
 - i. 10 tons per year of each hazardous air pollutant, and
 - ii. 25 tons per year of all hazardous air pollutants combined.
 The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if the hazardous air pollutants (HAP) emissions exceed this limit.

Monitoring/Recordkeeping Requirements [15A NCAC 02Q .0508(f)]

- b. The Permittee shall operate the DLAs (**ID Nos. CD-K1K2 and CD-K3**) at all times the brick tunnel kilns (**ID Nos. K-1, K-2, and K-3**) are in operation, except during periods of startup, shutdown, or malfunction or during operation in bypass mode for routine maintenance of the DLAs (**ID Nos. CD-K1K2 and CD-K3**).
- c. The Permittee shall maintain an adequate amount of limestone in the limestone hopper, storage bin (located at the top of the DLA), and DLAs (**ID Nos. CD-K1K2 and CD-K3**) at all times.
 - i. Once per day, the Permittee shall verify that the limestone hopper and storage bin at the DLAs (**ID Nos. CD-K1K2 and CD-K3**) contain adequate limestone and record the results.
 - ii. The record of the daily check shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request.
 The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if these monitoring and recordkeeping requirements are not met or if the Permittee does not maintain an adequate amount of limestone as provided above.
- d. The Permittee shall use the same grade of limestone at the DLAs (**ID Nos. CD-K1K2 and CD-K3**) from the same source as was used during the performance test. The Permittee shall maintain records of the source and grade of limestone used. The records shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if these records are not maintained.
- e. The Permittee shall maintain the limestone feeder settings at the DLAs (**ID Nos. CD-K1K2 and CD-K3**) at or above the level established during the performance test.
 - i. Once per day, the Permittee shall check and record the limestone feeder setting to verify that it is being maintained at or above the level established during the performance test.
 - ii. The record of the daily check shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request.
 The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if these monitoring and recordkeeping requirements are not met or if the Permittee does not maintain the limestone feeder setting as provided above.
- f. Once per calendar month, the Permittee shall ensure that the limestone feed system on the DLAs (**ID Nos. CD-K1K2 and CD-K3**) replaces limestone at least as frequently as the schedule set during the performance test. The Permittee shall create and maintain a record of the monthly check in a logbook (written or electronic format) on-site and shall make the records available to an authorized representative upon request. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if this requirement is not met.

- g. The Permittee shall monitor the bypass damper position for the DLAs (**ID Nos. CD-K1K2 and CD-K3**) at the brick tunnel kilns (**ID Nos. K-1, K-2, and K-3**) as follows:
- The Permittee shall secure the bypass damper in a closed and locked position.
 - The Permittee shall conduct a visual inspection of the bypass damper once per day to ensure that the damper is maintained in a closed and locked position.
 - If the lock has been broken or if the damper position has changed, except for periods of routine maintenance as specified in Section 2.1 C.6.h below, the Permittee shall monitor and record the bypass damper position at least every 15 minutes for the DLAs (**ID Nos. CD-K1K2 and CD-K3**) until the bypass damper has been returned to a closed and locked position.
 - The Permittee shall record the total time the kilns were operated in bypass mode.
 - The record of the monitoring shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request.
- The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if these monitoring and recordkeeping requirements are not met.
- h. The Permittee shall maintain a record of each period when the brick tunnel kilns (**ID Nos. K-1, K-2, and K-3**) are operated while bypassing the DLAs (**ID Nos. CD-K1K2 and CD-K3**) in order to perform routine maintenance. The records shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request, and shall include:
- The start date and start time of the routine maintenance;
 - The stop date and stop time of the routine maintenance;
 - A description of the maintenance activities; and,
 - The total time the kilns have operated in bypass mode during periods of routine maintenance.
- The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if these records are not maintained.
- i. The Permittee shall maintain a record of each period when the brick tunnel kilns (**ID Nos. K-1, K-2, and K-3**) are operated without the DLAs (**ID Nos. CD-K1K2 and CD-K3**) during periods of startup, shutdown, or malfunction (SSM). The records shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request, and shall include:
- The start date and start time of the SSM event;
 - The stop date and stop time of the SSM event; and
 - The total time the kilns have operated without the DLA during the SSM event.
- The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if these records are not maintained.
- j. The Permittee shall maintain records of the production rates on a fired-product basis and HAP emissions for each brick tunnel kiln (**ID Nos. K-1, K-2, and K-3**). The Permittee shall maintain monthly records as follows:
- The Permittee shall record the quantity of bricks produced from each brick tunnel kiln each month and for the 12-month period ending on that month.
 - The Permittee shall determine the total time the kilns were operated in bypass mode each month and for the 12-month period ending on that month.
 - The Permittee shall calculate HAP emissions in pounds each month and for the 12-month period ending on that month. Emissions of HF and HCl when the kilns are operated in bypass mode or when the DLAs (**ID Nos. CD-K1K2 and CD-K3**) are not in operation during SSM events must be based on uncontrolled emissions factors.
- The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if the brick production or the HAP emissions are not calculated or the records are not maintained.
- k. The Permittee shall keep a record of the applicability determination (request for minor HAP source status) on site at the source for a period of five years after the determination, or until the source becomes an affected source. The determination must include the analysis demonstrating why the Permittee believes the source is unaffected pursuant to 40 CFR Part 63.10(b)(3). The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if the records are not maintained.

Reporting Requirements [15A NCAC 02Q .0508(f)]

- The Permittee shall submit a summary report of monitoring and recordkeeping activities given in Sections 2.1 C.6.b through k above postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. The report shall contain the following:
 - greatest quantity in pounds of an individual hazardous air pollutant emitted:

- (A) for each month during the semiannual period, and
- (B) for each 12-month period ending on each month during the semiannual period using a 12-month rolling total;
- ii. pounds of all hazardous air pollutants emitted:
 - (A) for each month during the semiannual period, and
 - (B) for each 12-month period ending on each month during the semiannual period using a 12-month rolling total.
- iii. All instances of deviations from the requirements of this permit must be clearly identified.

D. Natural Gas-Fired Rotary Coatings Dryer (ID Nos. SD-1)

The following table provides a summary of limits and/or standards for the rotary sand dryer.

Regulated Pollutant	Limits/Standards	Applicable Regulation
Sulfur dioxide	2.3 pounds per million Btu heat input Note limits and discussion in Section 2.1. D.2	15A NCAC 02D .0516(a)
Particulate matter including PM ₁₀ and visible emissions	Particulate emissions from the rotary coatings dryer shall not exceed 0.057 g/dscm and visible emissions shall not exceed 10% Note limits and discussion in Section 2.1. D.3	15A NCAC 02D .0524 (40 CFR 60.730, Subpart UUU)
Odors	Odorous emissions must be controlled - Section 2.2. A.1 Facility Wide Affected Emission Sources; State-enforceable only	15A NCAC 02D .1806

1. 15A NCAC 02D .0516: SULFUR DIOXIDE EMISSIONS FROM COMBUSTION SOURCES

- a. Emissions of sulfur dioxide from the rotary coatings dryer shall not exceed 2.3 pounds per million Btu heat input. Sulfur dioxide formed by the combustion of sulfur in fuels, wastes, ores, and other substances shall be included when determining compliance with this standard. [15A NCAC 02D .0516(a)].
- Testing** [15A NCAC 02Q .0508(f)]
- b. If emissions testing is required, the testing shall be performed in accordance with 15A NCAC 02D .0501(c)(4) and General Condition JJ found in Section 3. If the results of this test are above the limit given in Section 2.1 D.2. a., above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0516.

Monitoring/Recordkeeping [15A NCAC 02Q .0508(f)]

- c. No monitoring, record keeping, or reporting is required for sulfur dioxide emissions from the firing of natural gas in the rotary coatings dryer.

2. 15A NCAC 02D .0524: NEW SOURCE PERFORMANCE STANDARDS (40 CFR 60 SUBPART UUU (40 CFR 60.730 - 60.737) STANDARDS OF PERFORMANCE FOR CALCINERS AND DRYERS IN MINERAL INDUSTRIES)

- a. As required by 40 CFR 60.732, on and after the date on which the performance test required to be conducted by 40 CFR 60.8 is completed, but not later than 180 days after the initial startup, whichever date comes first, no emissions shall be discharged into the atmosphere from any affected facility that:
 - i. Contain particulate matter in excess of 0.057 g/dscm (0.025 gr/dscf) for dryers; and;
 - ii. Exhibit greater than 10 percent opacity.
- b. As required by 40 CFR 60.11(c), the opacity standards set forth in this part shall apply at all times except during periods of startup, shutdown, malfunction, and as otherwise provided in the applicable standard
- c. As required by 40 CFR 60.11(d), at all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on available information which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.
- d. Additionally, the Permittee shall comply with all applicable provisions, notification, testing, reporting, record keeping, and monitoring requirements contained in Environmental Management Commission Standard 15A

NCAC 02D .0524 "New Source Performance Standards (NSPS) as promulgated in 40 CFR Part 60.730, Subpart UUU, including Subpart A "General Provisions."

Testing [15A NCAC 02Q .0508(f)]

- e. Initial compliance or when subsequent additional testing is required, shall be in accordance with the requirements of 15A NCAC 02D .0524 (40 CFR 60.730, Subpart UUU), 15A NCAC 02D .0501(c)(3), (c)(8), and (c)(18) and General Condition JJ, has been or will be performed when determining compliance of each individual affected facility with 40 CFR 60.732. If test results exceed the applicable limit(s) as given in Section 2.1 D.3. a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524.

Monitoring/Recordkeeping [15A NCAC 02Q .0508(f)]

- f. In conducting the performance tests required in by 40 CFR 60.8, the Permittee shall use as reference methods and procedures, the test methods in 40 CFR Part 60, Appendix A or other methods and procedures as specified in this section, except as provided in 40 CFR 60.8(b).
- g. In determining compliance with the particulate matter standards in 40 CFR 60.732, **see Section 2.1. D.3.a, above**, the Permittee shall determine compliance as follows:
 - i. 40 CFR Part 60, Appendix A, Method 5 shall be used to determine the particulate matter concentration. The sampling time and volume for each test run shall be at least 2 hours and 1.70 dscm.
 - ii. 40 CFR Part 60, Appendix A, Method 9 and the procedures in 40 CFR 60.11 shall be used to determine opacity from stack emissions.
- h. Compliance with opacity standards in this part shall be determined by conducting observations in accordance with Method 9. For purposes of determining initial compliance, the minimum total time of observations shall be 3 hours (thirty 6-minute averages) for the performance test or other set of observations (meaning those fugitive-type emission sources subject only to an opacity standard).
- i. To ensure compliance with 40 CFR 60.730(b) (**see section 2.1. D.3.a.ii., above**) the Permittee shall observe, on a monthly basis, emissions from the rotary sand dryer (**ID No. SD-1**) for any visible emissions above normal. The Permittee shall establish "normal" for the affected facilities using weekly observations taken in the first 30 days following the effective date of the permit. Should visible emissions be observed to be above normal for an affected facility, the Permittee shall be
 - i. be deemed to be in noncompliance with 15A NCAC 02D .0524 or
 - ii. demonstrate that the visible fugitive emissions, in accordance with 15A NCAC 02D .0501(c)(8) and (18) [**see Section 2.1. D.3.h., above**] are demonstrated to comply with the applicable limit given in 40 CFR 60.732(b) [10% opacity].If the demonstration in (b) above cannot be made, the Permittee shall be deemed to be in noncompliance with 15A NCAC 02D .0524 and 40 CFR 60.730.
- j. The results of performance evaluations, discussed above in **Section 2.1. D.3.i.**, shall be maintained in a log (written or electronic format) on-site and made available to an authorized representative of DAQ upon request. The log shall record the following:
 - i. the date and time of each recorded action;
 - ii. the results of each observation and/or test noting those sources with emissions that were observed to be in noncompliance along with any corrective actions taken to reduce visible emissions; and
 - iii. the results of any corrective actions performed.The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524 if these records are not maintained.
- k. To ensure compliance with the requirements of 40 CFR 60.732(a) (**see section 2.1. D.3.a.i., above**), the Permittee shall perform periodic inspections and maintenance as needed and as recommended by the manufacturer for each affected facility in the rotary sand dryer. In addition to the manufacturer's inspection and maintenance recommendations, or if there is no manufacturer's inspection and maintenance recommendations, as a minimum, the inspection and maintenance requirement shall include the following:
 - i. a semi-annual internal inspection of the units that comprise the rotary sand dryer for deterioration, damage, and leaksThe Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524 if the affected facilities and duct work of the rotary sand dryer are not visually inspected.
- l. The results of inspection and maintenance shall be maintained in a log (written or electronic format) on-site and made available to an authorized representative of DAQ upon request. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524 if the sand dryer is not inspected and maintained. The log shall record the following:
 - i. the date and time of each recorded action;
 - ii. the results of each inspection; and

- iii. the results of any maintenance performed on the rotary sand dryer; and
 - iv. any variance from manufacturer's recommendations, if any, and corrections made.
- The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524 if these records are not maintained.
- m. The Permittee shall retain records of all information resulting from monitoring activities and information indicating operating parameters as specified in this condition for a minimum of five (5) years from the date of recording.

Reporting [15A NCAC 02Q .0508(f)]

- n. As required in 40CFR 60.11(e)(2), the Permittee shall submit written summary reports of inspection and maintenance activities and the results of all performance tests conducted to demonstrate compliance with the standards set forth in 40 CFR 60.8 and 40 CFR 60.732, **see Section 2.1. D.3.a, above**, by January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.
- o. As required in 40 CFR 60.11(e)(1), the Permittee shall make available, upon request by DAQ, such records as may be necessary to determine the conditions under which the visual observations were made and shall provide evidence indicating proof of current visible emission observer certification.
- p. In addition to any other notification requirements to the Environmental Protection Agency (EPA), the Permittee is required to **NOTIFY** the Regional Supervisor, DAQ, in **WRITING**, of the following:
 - i. the date construction (40 CFR 60.7) or reconstruction (40 CFR 60.15) of an affected facility is commenced, postmarked no later than 30 days after such date;
 - ii. the anticipated date of initial start-up of an affected facility, postmarked not more than 60 days nor less than 30 days prior to such date; and
 - iii. the actual date of initial start-up of an affected facility, postmarked within 15 days after such date.

2.2 Multiple Emission Source(s) Specific Limitations and Conditions

A. Facility-wide affected emission sources

The following table provides a summary of limits and standards applicable facility wide:

Regulated Pollutant	Limits/Standards	Applicable Regulation
Odors	Odorous emissions must be controlled; State enforceable only	15A NCAC 02D .1806
Toxic air pollutants	Toxic air pollutant emissions shall not exceed the levels listed in 02Q .0711 unless ambient standards are not exceeded; State-enforceable only	15A NCAC 02Q .0711

State-enforceable only

1. 15A NCAC 02D .1806: CONTROL AND PROHIBITION OF ODOROUS EMISSIONS

- The Permittee shall not operate the facility without implementing management practices or installing and operating odor control equipment sufficient to prevent odorous emissions from the facility from causing or contributing to objectionable odors beyond the facility's boundary.

State-Enforceable Only

2. 15A NCAC 02Q .0711: PERMIT REQUIREMENTS FOR TOXIC AIR POLLUTANTS

- Pursuant to 15A NCAC 02Q .0711 "Emission Rates Requiring a Permit", for each of the below listed toxic air pollutants (TAPs), the Permittee has made a demonstration that facility-wide actual emissions do not exceed the Toxic Permit Emission Rates (TPERs) listed in 15A NCAC 02Q .0711. The facility shall be operated and maintained in such a manner that emissions of any listed TAPs from the facility, including fugitive emissions, will not exceed TPERs listed in 15A NCAC 02Q .0711.
 - A permit to emit any of the below listed TAPs shall be required for this facility if actual emissions from all sources will become greater than the corresponding TPERs.
 - PRIOR to exceeding any of these listed TPERs, the Permittee shall be responsible for obtaining a permit to emit TAPs and for demonstrating compliance with the requirements of 15A NCAC 02D.1100 "Control of Toxic Air Pollutants".
 - The Permittee shall maintain at the facility, records of operational information sufficient for demonstrating to the Division of Air Quality staff that actual TAPs are less than the rate listed in 15A NCAC 02Q .0711. The TPER table listed below is provided to assist the Permittee in determining when an air permit is required pursuant to 15A NCAC 02Q .0711 and may not represent all TAPs being emitted from the facility. This table will be updated at such time as the permit is either modified or renewed.

Pollutant (CAS Number)	TPERs Limitations			
	Carcinogens (lb/yr)	Chronic Toxicants (lb/day)	Acute Systemic Toxicants (lb/hr)	Acute Irritants (lb/hr)
Carbon disulfide (75-15-0)		3.9		
P-dichlorobenzene (106-46-7)				16.8
Formaldehyde (50-00-0)				0.04
Manganese and compounds		0.63		
Methyl chloroform (71-55-6)		250		64
Methyl ethyl ketone (78-93-3)		78		22.4
Perchloroethylene (127-18-4)	13,000			
Phenol (108-95-2)			0.24	

Pollutant (CAS Number)	TPERs Limitations			
	Carcinogens (lb/yr)	Chronic Toxicants (lb/day)	Acute Systemic Toxicants (lb/hr)	Acute Irritants (lb/hr)
Styrene (100-42-5)			2.7	
Toluene (108-88-3)		98		14.4
Xylene (1330-20-7)		57		16.4

SECTION 3 - GENERAL CONDITIONS (version 5.1, 08/03/2017)

This section describes terms and conditions applicable to this Title V facility.

A. **General Provisions** [NCGS 143-215 and 15A NCAC 02Q .0508(i)(16)]

1. Terms not otherwise defined in this permit shall have the meaning assigned to such terms as defined in 15A NCAC 02D and 02Q.
2. The terms, conditions, requirements, limitations, and restrictions set forth in this permit are binding and enforceable pursuant to NCGS 143-215.114A and 143-215.114B, including assessment of civil and/or criminal penalties. Any unauthorized deviation from the conditions of this permit may constitute grounds for revocation and/or enforcement action by the DAQ.
3. This permit is not a waiver of or approval of any other Department permits that may be required for other aspects of the facility which are not addressed in this permit.
4. This permit does not relieve the Permittee from liability for harm or injury to human health or welfare, animal or plant life, or property caused by the construction or operation of this permitted facility, or from penalties therefore, nor does it allow the Permittee to cause pollution in contravention of state laws or rules, unless specifically authorized by an order from the North Carolina Environmental Management Commission.
5. Except as identified as state-only requirements in this permit, all terms and conditions contained herein shall be enforceable by the DAQ, the EPA, and citizens of the United States as defined in the Federal Clean Air Act.
6. Any stationary source of air pollution shall not be operated, maintained, or modified without the appropriate and valid permits issued by the DAQ, unless the source is exempted by rule. The DAQ may issue a permit only after it receives reasonable assurance that the installation will not cause air pollution in violation of any of the applicable requirements. A permitted installation may only be operated, maintained, constructed, expanded, or modified in a manner that is consistent with the terms of this permit.

B. **Permit Availability** [15A NCAC 02Q .0507(k) and .0508(i)(9)(B)]

The Permittee shall have available at the facility a copy of this permit and shall retain for the duration of the permit term one complete copy of the application and any information submitted in support of the application package. The permit and application shall be made available to an authorized representative of Department of Environmental Quality upon request.

C. **Severability Clause** [15A NCAC 02Q .0508(i)(2)]

In the event of an administrative challenge to a final and binding permit in which a condition is held to be invalid, the provisions in this permit are severable so that all requirements contained in the permit, except those held to be invalid, shall remain valid and must be complied with.

D. **Submissions** [15A NCAC 02Q .0507(e) and 02Q .0508(i)(16)]

Except as otherwise specified herein, two copies of all documents, reports, test data, monitoring data, notifications, request for renewal, and any other information required by this permit shall be submitted to the appropriate Regional Office. Refer to the Regional Office address on the cover page of this permit. For continuous emissions monitoring systems (CEMS) reports, continuous opacity monitoring systems (COMS) reports, quality assurance (QA)/quality control (QC) reports, acid rain CEM certification reports, and NOx budget CEM certification reports, one copy shall be sent to the appropriate Regional Office and one copy shall be sent to:

Supervisor, Stationary Source Compliance
North Carolina Division of Air Quality
1641 Mail Service Center
Raleigh, NC 27699-1641

All submittals shall include the facility name and Facility ID number (refer to the cover page of this permit).

E. **Duty to Comply** [15A NCAC 02Q .0508(i)(3)]

The Permittee shall comply with all terms, conditions, requirements, limitations and restrictions set forth in this permit. Noncompliance with any permit condition except conditions identified as state-only requirements constitutes a violation of the Federal Clean Air Act. Noncompliance with any permit condition is grounds for enforcement action, for permit termination, revocation and reissuance, or modification, or for denial of a permit renewal application.

F. **Circumvention** - STATE ENFORCEABLE ONLY

The facility shall be properly operated and maintained at all times in a manner that will effect an overall reduction in air pollution. Unless otherwise specified by this permit, no emission source may be operated without the concurrent operation of its associated air pollution control device(s) and appurtenances.

G. **Permit Modifications**

1. Administrative Permit Amendments [15A NCAC 02Q .0514]
The Permittee shall submit an application for an administrative permit amendment in accordance with 15A NCAC 02Q .0514.
2. Transfer in Ownership or Operation and Application Submittal Content [15A NCAC 02Q .0524 and 02Q .0505]
The Permittee shall submit an application for an ownership change in accordance with 15A NCAC 02Q.0524 and 02Q .0505.
3. Minor Permit Modifications [15A NCAC 02Q .0515]
The Permittee shall submit an application for a minor permit modification in accordance with 15A NCAC 02Q .0515.
4. Significant Permit Modifications [15A NCAC 02Q .0516]
The Permittee shall submit an application for a significant permit modification in accordance with 15A NCAC 02Q .0516.
5. Reopening for Cause [15A NCAC 02Q .0517]
The Permittee shall submit an application for reopening for cause in accordance with 15A NCAC 02Q .0517.

H. **Changes Not Requiring Permit Modifications**

1. Reporting Requirements
Any of the following that would result in new or increased emissions from the emission source(s) listed in Section 1 must be reported to the Regional Supervisor, DAQ:
 - a. changes in the information submitted in the application;
 - b. changes that modify equipment or processes; or
 - c. changes in the quantity or quality of materials processed.

If appropriate, modifications to the permit may then be made by the DAQ to reflect any necessary changes in the permit conditions. In no case are any new or increased emissions allowed that will cause a violation of the emission limitations specified herein.

2. Section 502(b)(10) Changes [15A NCAC 02Q .0523(a)]
 - a. "Section 502(b)(10) changes" means changes that contravene an express permit term or condition. Such changes do not include changes that would violate applicable requirements or contravene federally enforceable permit terms and conditions that are monitoring (including test methods), recordkeeping, reporting, or compliance certification requirements.
 - b. The Permittee may make Section 502(b)(10) changes without having the permit revised if:
 - i. the changes are not a modification under Title I of the Federal Clean Air Act;
 - ii. the changes do not cause the allowable emissions under the permit to be exceeded;
 - iii. the Permittee notifies the Director and EPA with written notification at least seven days before the change is made; and
 - iv. the Permittee shall attach the notice to the relevant permit.
 - c. The written notification shall include:
 - i. a description of the change;
 - ii. the date on which the change will occur;
 - iii. any change in emissions; and
 - iv. any permit term or condition that is no longer applicable as a result of the change.
 - d. Section 502(b)(10) changes shall be made in the permit the next time that the permit is revised or renewed, whichever comes first.
3. Off Permit Changes [15A NCAC 02Q .0523(b)]
The Permittee may make changes in the operation or emissions without revising the permit if:
 - a. the change affects only insignificant activities and the activities remain insignificant after the change; or
 - b. the change is not covered under any applicable requirement.
4. Emissions Trading [15A NCAC 02Q .0523(c)]
To the extent that emissions trading is allowed under 15A NCAC 02D, including subsequently adopted maximum achievable control technology standards, emissions trading shall be allowed without permit revision pursuant to 15A NCAC 02Q .0523(c).

I.A. Reporting Requirements for Excess Emissions and Permit Deviations [15A NCAC 02D .0535(f) and 02Q .0508(f)(2)]

"Excess Emissions" - means an emission rate that exceeds any applicable emission limitation or standard allowed by any rule in Sections .0500, .0900, .1200, or .1400 of Subchapter 02D; or by a permit condition; or that exceeds an emission limit established in a permit issued under 15A NCAC 02Q .0700. *(Note: Definitions of excess emissions under 02D .1110 and 02D .1111 shall apply where defined by rule.)*

"Deviations" - for the purposes of this condition, any action or condition not in accordance with the terms and conditions of this permit including those attributable to upset conditions as well as excess emissions as defined above lasting less than four hours.

Excess Emissions

1. If a source is required to report excess emissions under NSPS (15A NCAC 02D .0524), NESHAPS (15A NCAC 02D .1110 or .1111), or the operating permit provides for periodic (e.g., quarterly) reporting of excess emissions, reporting shall be performed as prescribed therein.
2. If the source is not subject to NSPS (15A NCAC 02D .0524), NESHAPS (15A NCAC 02D .1110 or .1111), or these rules do NOT define "excess emissions," the Permittee shall report excess emissions in accordance with 15A NCAC 02D .0535 as follows:
 - a. Pursuant to 15A NCAC 02D .0535, if excess emissions last for more than four hours resulting from a malfunction, a breakdown of process or control equipment, or any other abnormal condition, the owner or operator shall:
 - i. notify the Regional Supervisor or Director of any such occurrence by 9:00 a.m. Eastern Time of the Division's next business day of becoming aware of the occurrence and provide:
 - name and location of the facility;
 - nature and cause of the malfunction or breakdown;
 - time when the malfunction or breakdown is first observed;
 - expected duration; and
 - estimated rate of emissions;
 - ii. notify the Regional Supervisor or Director immediately when corrective measures have been accomplished; and
 - iii. submit to the Regional Supervisor or Director within 15 days a written report as described in 15A NCAC 02D .0535(f)(3).

Permit Deviations

3. Pursuant to 15A NCAC 02Q .0508(f)(2), the Permittee shall report deviations from permit requirements (terms and conditions) as follows:
 - a. Notify the Regional Supervisor or Director of all other deviations from permit requirements not covered under 15A NCAC 02D .0535 quarterly. A written report to the Regional Supervisor shall include the probable cause of such deviation and any corrective actions or preventative actions taken. The responsible official shall certify all deviations from permit requirements.

I.B. Other Requirements under 15A NCAC 02D .0535

The Permittee shall comply with all other applicable requirements contained in 15A NCAC 02D .0535, including 15A NCAC 02D .0535(c) as follows:

1. Any excess emissions that do not occur during start-up and shut-down shall be considered a violation of the appropriate rule unless the owner or operator of the sources demonstrates to the Director, that the excess emissions are a result of a malfunction. The Director shall consider, along with any other pertinent information, the criteria contained in 15A NCAC 02D .0535(c)(1) through (7).
2. 15A NCAC 02D .0535(g). Excess emissions during start-up and shut-down shall be considered a violation of the appropriate rule if the owner or operator cannot demonstrate that excess emissions are unavoidable.

J. Emergency Provisions [40 CFR 70.6(g)]

The Permittee shall be subject to the following provisions with respect to emergencies:

1. An emergency means any situation arising from sudden and reasonably unforeseeable events beyond the control of the facility, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the facility to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent

caused by improperly designed equipment, lack of preventive maintenance, careless or improper operation, or operator error.

2. An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if the conditions specified in 3. below are met.
3. The affirmative defense of emergency shall be demonstrated through properly signed contemporaneous operating logs or other relevant evidence that include information as follows:
 - a. an emergency occurred and the Permittee can identify the cause(s) of the emergency;
 - b. the permitted facility was at the time being properly operated;
 - c. during the period of the emergency the Permittee took all reasonable steps to minimize levels of emissions that exceeded the standards or other requirements in the permit; and
 - d. the Permittee submitted notice of the emergency to the DAQ within two working days of the time when emission limitations were exceeded due to the emergency. This notice must contain a description of the emergency, steps taken to mitigate emissions, and corrective actions taken.
4. In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
5. This provision is in addition to any emergency or upset provision contained in any applicable requirement specified elsewhere herein.

K. **Permit Renewal** [15A NCAC 02Q .0508(e) and 02Q .0513(b)]

This 15A NCAC 02Q .0500 permit is issued for a fixed term not to exceed five years and shall expire at the end of its term. Permit expiration terminates the facility's right to operate unless a complete 15A NCAC 02Q .0500 renewal application is submitted at least nine months before the date of permit expiration. If the Permittee or applicant has complied with 15A NCAC 02Q .0512(b)(1), this 15A NCAC 02Q .0500 permit shall not expire until the renewal permit has been issued or denied. Permit expiration under 15A NCAC 02Q .0400 terminates the facility's right to operate unless a complete 15A NCAC 02Q .0400 renewal application is submitted at least six months before the date of permit expiration for facilities subject to 15A NCAC 02Q .0400 requirements. In either of these events, all terms and conditions of these permits shall remain in effect until the renewal permits have been issued or denied.

L. **Need to Halt or Reduce Activity Not a Defense** [15A NCAC 02Q .0508(i)(4)]

It shall not be a defense for a Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

M. **Duty to Provide Information (submittal of information)** [15A NCAC 02Q .0508(i)(9)]

1. The Permittee shall furnish to the DAQ, in a timely manner, any reasonable information that the Director may request in **writing** to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit.
2. The Permittee shall furnish the DAQ copies of records required to be kept by the permit when such copies are requested by the Director. For information claimed to be confidential, the Permittee may furnish such records directly to the EPA upon request along with a claim of confidentiality.

N. **Duty to Supplement** [15A NCAC 02Q .0507(f)]

The Permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to the DAQ. The Permittee shall also provide additional information as necessary to address any requirement that becomes applicable to the facility after the date a complete permit application was submitted but prior to the release of the draft permit.

O. **Retention of Records** [15A NCAC 02Q .0508(f) and 02Q .0508 (l)]

The Permittee shall retain records of all required monitoring data and supporting information for a period of at least five years from the date of the monitoring sample, measurement, report, or application. Supporting information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring information, and copies of all reports required by the permit. These records shall be maintained in a form suitable and readily available for expeditious inspection and review. Any records required by the conditions of this permit shall be kept on site and made available to DAQ personnel for inspection upon request.

P. **Compliance Certification** [15A NCAC 02Q .0508(n)]

The Permittee shall submit to the DAQ and the EPA (Air and EPCRA Enforcement Branch, EPA, Region 4, 61 Forsyth Street SW, Atlanta, GA 30303) postmarked on or before March 1 a compliance certification (for the preceding calendar year) by a responsible official with all federally-enforceable terms and conditions in the permit, including emissions

limitations, standards, or work practices. It shall be the responsibility of the current owner to submit a compliance certification for the entire year regardless of who owned the facility during the year. The compliance certification shall comply with additional requirements as may be specified under Sections 114(a)(3) or 504(b) of the Federal Clean Air Act. The compliance certification shall specify:

1. the identification of each term or condition of the permit that is the basis of the certification;
2. the compliance status (with the terms and conditions of the permit for the period covered by the certification);
3. whether compliance was continuous or intermittent; and
4. the method(s) used for determining the compliance status of the source during the certification period.

Q. Certification by Responsible Official [15A NCAC 02Q .0520]

A responsible official shall certify the truth, accuracy, and completeness of any application form, report, or compliance certification required by this permit. All certifications shall state that based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

R. Permit Shield for Applicable Requirements [15A NCAC 02Q .0512]

1. Compliance with the terms and conditions of this permit shall be deemed compliance with applicable requirements, where such applicable requirements are included and specifically identified in the permit as of the date of permit issuance.
2. A permit shield shall not alter or affect:
 - a. the power of the Commission, Secretary of the Department, or Governor under NCGS 143-215.3(a)(12), or EPA under Section 303 of the Federal Clean Air Act;
 - b. the liability of an owner or operator of a facility for any violation of applicable requirements prior to the effective date of the permit or at the time of permit issuance;
 - c. the applicable requirements under Title IV; or
 - d. the ability of the Director or the EPA under Section 114 of the Federal Clean Air Act to obtain information to determine compliance of the facility with its permit.
3. A permit shield does not apply to any change made at a facility that does not require a permit or permit revision made under 15A NCAC 02Q .0523.
4. A permit shield does not extend to minor permit modifications made under 15A NCAC 02Q .0515.

S. Termination, Modification, and Revocation of the Permit [15A NCAC 02Q .0519]

The Director may terminate, modify, or revoke and reissue this permit if:

1. the information contained in the application or presented in support thereof is determined to be incorrect;
2. the conditions under which the permit or permit renewal was granted have changed;
3. violations of conditions contained in the permit have occurred;
4. the EPA requests that the permit be revoked under 40 CFR 70.7(g) or 70.8(d); or
5. the Director finds that termination, modification, or revocation and reissuance of the permit is necessary to carry out the purpose of NCGS Chapter 143, Article 21B.

T. Insignificant Activities [15A NCAC 02Q .0503]

Because an emission source or activity is insignificant does not mean that the emission source or activity is exempted from any applicable requirement or that the owner or operator of the source is exempted from demonstrating compliance with any applicable requirement. The Permittee shall have available at the facility at all times and made available to an authorized representative upon request, documentation, including calculations, if necessary, to demonstrate that an emission source or activity is insignificant.

U. Property Rights [15A NCAC 02Q .0508(i)(8)]

This permit does not convey any property rights in either real or personal property or any exclusive privileges.

V. Inspection and Entry [15A NCAC 02Q .0508(l) and NCGS 143-215.3(a)(2)]

1. Upon presentation of credentials and other documents as may be required by law, the Permittee shall allow the DAQ, or an authorized representative, to perform the following:
 - a. enter the Permittee's premises where the permitted facility is located or emissions-related activity is conducted, or where records are kept under the conditions of the permit;
 - b. have access to and copy, at reasonable times, any records that are required to be kept under the conditions of the permit;
 - c. inspect at reasonable times and using reasonable safety practices any source, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and

- d. sample or monitor substances or parameters, using reasonable safety practices, for the purpose of assuring compliance with the permit or applicable requirements at reasonable times.

Nothing in this condition shall limit the ability of the EPA to inspect or enter the premises of the Permittee under Section 114 or other provisions of the Federal Clean Air Act.

2. No person shall refuse entry or access to any authorized representative of the DAQ who requests entry for purposes of inspection, and who presents appropriate credentials, nor shall any person obstruct, hamper, or interfere with any such authorized representative while in the process of carrying out his official duties. Refusal of entry or access may constitute grounds for permit revocation and assessment of civil penalties.

W. **Annual Fee Payment** [15A NCAC 02Q .0508(i)(10)]

1. The Permittee shall pay all fees in accordance with 15A NCAC 02Q .0200.
2. Payment of fees may be by check or money order made payable to the N.C. Department of Environmental Quality. Annual permit fee payments shall refer to the permit number.
3. If, within 30 days after being billed, the Permittee fails to pay an annual fee, the Director may initiate action to terminate the permit under 15A NCAC 02Q .0519.

X. **Annual Emission Inventory Requirements** [15A NCAC 02Q .0207]

The Permittee shall report by **June 30 of each year** the actual emissions of each air pollutant listed in 15A NCAC 02Q .0207(a) from each emission source within the facility during the previous calendar year. The report shall be in or on such form as may be established by the Director. The accuracy of the report shall be certified by a responsible official of the facility.

Y. **Confidential Information** [15A NCAC 02Q .0107 and 02Q. 0508(i)(9)]

Whenever the Permittee submits information under a claim of confidentiality pursuant to 15A NCAC 02Q .0107, the Permittee may also submit a copy of all such information and claim directly to the EPA upon request. All requests for confidentiality must be in accordance with 15A NCAC 02Q .0107.

Z. **Construction and Operation Permits** [15A NCAC 02Q .0100 and .0300]

A construction and operating permit shall be obtained by the Permittee for any proposed new or modified facility or emission source which is not exempted from having a permit prior to the beginning of construction or modification, in accordance with all applicable provisions of 15A NCAC 02Q .0100 and .0300.

AA. **Standard Application Form and Required Information** [15A NCAC 02Q .0505 and .0507]

The Permittee shall submit applications and required information in accordance with the provisions of 15A NCAC 02Q .0505 and .0507.

BB. **Financial Responsibility and Compliance History** [15A NCAC 02Q .0507(d)(4)]

The DAQ may require an applicant to submit a statement of financial qualifications and/or a statement of substantial compliance history.

CC. **Refrigerant Requirements (Stratospheric Ozone and Climate Protection)** [15A NCAC 02Q .0501(e)]

1. If the Permittee has appliances or refrigeration equipment, including air conditioning equipment, which use Class I or II ozone-depleting substances such as chlorofluorocarbons and hydrochlorofluorocarbons listed as refrigerants in 40 CFR Part 82 Subpart A Appendices A and B, the Permittee shall service, repair, and maintain such equipment according to the work practices, personnel certification requirements, and certified recycling and recovery equipment specified in 40 CFR Part 82 Subpart F.
2. The Permittee shall not knowingly vent or otherwise release any Class I or II substance into the environment during the repair, servicing, maintenance, or disposal of any such device except as provided in 40 CFR Part 82 Subpart F.
3. The Permittee shall comply with all reporting and recordkeeping requirements of 40 CFR 82.166. Reports shall be submitted to the EPA or its designee as required.

DD. **Prevention of Accidental Releases - Section 112(r)** [15A NCAC 02Q .0508(h)]

If the Permittee is required to develop and register a Risk Management Plan with EPA pursuant to Section 112(r) of the Clean Air Act, then the Permittee is required to register this plan in accordance with 40 CFR Part 68.

EE. Prevention of Accidental Releases General Duty Clause - Section 112(r)(1) – FEDERALLY-ENFORCEABLE ONLY

Although a risk management plan may not be required, if the Permittee produces, processes, handles, or stores any amount of a listed hazardous substance, the Permittee has a general duty to take such steps as are necessary to prevent the accidental release of such substance and to minimize the consequences of any release.

FF. Title IV Allowances [15A NCAC 02Q .0508(i)(1)]

This permit does not limit the number of Title IV allowances held by the Permittee, but the Permittee may not use allowances as a defense to noncompliance with any other applicable requirement. The Permittee's emissions may not exceed any allowances that the facility lawfully holds under Title IV of the Federal Clean Air Act.

GG. Air Pollution Emergency Episode [15A NCAC 02D .0300]

Should the Director of the DAQ declare an Air Pollution Emergency Episode, the Permittee will be required to operate in accordance with the Permittee's previously approved Emission Reduction Plan or, in the absence of an approved plan, with the appropriate requirements specified in 15A NCAC 02D .0300.

HH. Registration of Air Pollution Sources [15A NCAC 02D .0202]

The Director of the DAQ may require the Permittee to register a source of air pollution. If the Permittee is required to register a source of air pollution, this registration and required information will be in accordance with 15A NCAC 02D .0202(b).

II. Ambient Air Quality Standards [15A NCAC 02D .0501(c)]

In addition to any control or manner of operation necessary to meet emission standards specified in this permit, any source of air pollution shall be operated with such control or in such manner that the source shall not cause the ambient air quality standards in 15A NCAC 02D .0400 to be exceeded at any point beyond the premises on which the source is located. When controls more stringent than named in the applicable emission standards in this permit are required to prevent violation of the ambient air quality standards or are required to create an offset, the permit shall contain a condition requiring these controls.

JJ. General Emissions Testing and Reporting Requirements [15A NCAC 02Q .0508(i)(16)]

Emission compliance testing shall be by the procedures of Section .2600, except as may be otherwise required in Rules .0524, .0912, .1110, .1111, or .1415 of Subchapter 02D. If emissions testing is required by this permit or the DAQ or if the Permittee submits emissions testing to the DAQ to demonstrate compliance, the Permittee shall perform such testing in accordance with 15A NCAC 02D .2600 and follow the procedures outlined below:

1. The owner or operator of the source shall arrange for air emission testing protocols to be provided to the Director prior to air pollution testing. Testing protocols are not required to be pre-approved by the Director prior to air pollution testing. The Director shall review air emission testing protocols for pre-approval prior to testing if requested by the owner or operator at least **45 days** before conducting the test.
2. Any person proposing to conduct an emissions test to demonstrate compliance with an applicable standard shall notify the Director at least **15 days** before beginning the test so that the Director may at his option observe the test.
3. The owner or operator of the source shall arrange for controlling and measuring the production rates during the period of air testing. The owner or operator of the source shall ensure that the equipment or process being tested is operated at the production rate that best fulfills the purpose of the test. The individual conducting the emission test shall describe the procedures used to obtain accurate process data and include in the test report the average production rates determined during each testing period.
4. Two copies of the final air emission test report shall be submitted to the Director not later than **30 days** after sample collection unless otherwise specified in the specific conditions. The owner or operator may request an extension to submit the final test report. The Director shall approve an extension request if he finds that the extension request is a result of actions beyond the control of the owner or operator.
 - a. The Director shall make the final determination regarding any testing procedure deviation and the validity of the compliance test. The Director may:
 - i. Allow deviations from a method specified under a rule in this Section if the owner or operator of the source being tested demonstrates to the satisfaction of the Director that the specified method is inappropriate for the source being tested.
 - ii. Prescribe alternate test procedures on an individual basis when he finds that the alternative method is necessary to secure more reliable test data.

- iii. Prescribe or approve methods on an individual basis for sources or pollutants for which no test method is specified in this Section if the methods can be demonstrated to determine compliance of permitted emission sources or pollutants.
- b. The Director may authorize the Division of Air Quality to conduct independent tests of any source subject to a rule in this Subchapter to determine the compliance status of that source or to verify any test data submitted relating to that source. Any test conducted by the Division of Air Quality using the appropriate testing procedures described in Section 02D .2600 has precedence over all other tests.

KK. Reopening for Cause [15A NCAC 02Q .0517]

1. A permit shall be reopened and revised under the following circumstances:
 - a. additional applicable requirements become applicable to a facility with remaining permit term of three or more years;
 - b. additional requirements (including excess emission requirements) become applicable to a source covered by Title IV;
 - c. the Director or EPA finds that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit; or
 - d. the Director or EPA determines that the permit must be revised or revoked to assure compliance with the applicable requirements.
2. Any permit reopening shall be completed or a revised permit issued within 18 months after the applicable requirement is promulgated. No reopening is required if the effective date of the requirement is after the expiration of the permit term unless the term of the permit was extended pursuant to 15A NCAC 02Q .0513(c).
3. Except for the state-enforceable only portion of the permit, the procedures set out in 15A NCAC 02Q .0507, .0521, or .0522 shall be followed to reissue the permit. If the State-enforceable only portion of the permit is reopened, the procedures in 15A NCAC 02Q .0300 shall be followed. The proceedings shall affect only those parts of the permit for which cause to reopen exists.
4. The Director shall notify the Permittee at least 60 days in advance of the date that the permit is to be reopened, except in cases of imminent threat to public health or safety the notification period may be less than 60 days.
5. Within 90 days, or 180 days if the EPA extends the response period, after receiving notification from the EPA that a permit needs to be terminated, modified, or revoked and reissued, the Director shall send to the EPA a proposed determination of termination, modification, or revocation and reissuance, as appropriate.

LL. Reporting Requirements for Non-Operating Equipment [15A NCAC 02Q .0508(i)(16)]

The Permittee shall maintain a record of operation for permitted equipment noting whenever the equipment is taken from and placed into operation. When permitted equipment is not in operation, the requirements for testing, monitoring, and recordkeeping are suspended until operation resumes.

MM. Fugitive Dust Control Requirement [15A NCAC 02D .0540]

As required by 15A NCAC 02D .0540 "Particulates from Fugitive Dust Emission Sources," the Permittee shall not cause or allow fugitive dust emissions to cause or contribute to substantive complaints or excess visible emissions beyond the property boundary. If substantive complaints or excessive fugitive dust emissions from the facility are observed beyond the property boundaries for six minutes in any one hour (using Reference Method 22 in 40 CFR, Appendix A), the owner or operator may be required to submit a fugitive dust plan as described in 02D .0540(f).

"Fugitive dust emissions" means particulate matter from process operations that does not pass through a process stack or vent and that is generated within plant property boundaries from activities such as: unloading and loading areas, process areas, stockpiles, stock pile working, plant parking lots, and plant roads (including access roads and haul roads).

NN. Specific Permit Modifications [15A NCAC 02Q .0501 and .0523]

1. For modifications made pursuant to 15A NCAC 02Q .0501(c)(2), the Permittee shall file a Title V Air Quality Permit Application for the air emission source(s) and associated air pollution control device(s) on or before 12 months after commencing operation.
2. For modifications made pursuant to 15A NCAC 02Q .0501(d)(2), the Permittee shall not begin operation of the air emission source(s) and associated air pollution control device(s) until a Title V Air Quality Permit Application is filed and a construction and operation permit following the procedures of Section .0500 (except for Rule .0504 of this Section) is obtained.
3. For modifications made pursuant to 502(b)(10), in accordance with 15A NCAC 02Q .0523(a)(1)(C), the Permittee shall notify the Director and EPA (EPA - Air Planning Branch, 61 Forsyth Street SW, Atlanta, GA 30303) in writing at least seven days before the change is made. The written notification shall include:

- a. a description of the change at the facility;
- b. the date on which the change will occur;
- c. any change in emissions; and
- d. any permit term or condition that is no longer applicable as a result of the change.

In addition to this notification requirement, with the next significant modification or Air Quality Permit renewal, the Permittee shall submit a page "E5" of the application forms signed by the responsible official verifying that the application for the 502(b)(10) change/modification, is true, accurate, and complete. Further note that modifications made pursuant to 502(b)(10) do not relieve the Permittee from satisfying preconstruction requirements.

OO. **Third Party Participation and EPA Review** [15A NCAC 02Q .0521, .0522 and .0525(7)]

For permits modifications subject to 45-day review by the federal Environmental Protection Agency (EPA), EPA's decision to not object to the proposed permit is considered final and binding on the EPA and absent a third party petition, the failure to object is the end of EPA's decision-making process with respect to the revisions to the permit. The time period available to submit a public petition pursuant to 15A NCAC 02Q .0518 begins at the end of the 45-day EPA review period.

ATTACHMENT

List of Acronyms

AOS	Alternate Operating Scenario
BACT	Best Available Control Technology
Btu	British thermal unit
CAA	Clean Air Act
CAIR	Clean Air Interstate Rule
CEM	Continuous Emission Monitor
CFR	Code of Federal Regulations
DAQ	Division of Air Quality
DEQ	Department of Environmental Quality
EMC	Environmental Management Commission
EPA	Environmental Protection Agency
FR	Federal Register
GACT	Generally Available Control Technology
HAP	Hazardous Air Pollutant
MACT	Maximum Achievable Control Technology
NAA	Non-Attainment Area
NCAC	North Carolina Administrative Code
NCGS	North Carolina General Statutes
NESHAP	National Emission Standards for Hazardous Air Pollutants
NO_x	Nitrogen Oxides
NSPS	New Source Performance Standard
OAH	Office of Administrative Hearings
PM	Particulate Matter
PM₁₀	Particulate Matter with Nominal Aerodynamic Diameter of 10 Micrometers or Less
POS	Primary Operating Scenario
PSD	Prevention of Significant Deterioration
RACT	Reasonably Available Control Technology
SIC	Standard Industrial Classification
SIP	State Implementation Plan
SO₂	Sulfur Dioxide
tpy	Tons Per Year
VOC	Volatile Organic Compound